

**Perspectives in
Personality Theory**

Perspectives in Personality Theory

EDITED BY

Henry P. David, Ph.D.

AND

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Foreword

THE PUBLICATION of *Perspectives in Personality Theory* represents a real landmark in international cooperation among psychologists. Except for the reports of the various psychological congresses held over the years, this is the first important venture in such cooperation, with a truly international character both in its contents and in its contributors. It is also the first major volume to be issued under the auspices of the International Union of Scientific Psychology, with all royalties generously allocated to the Union in order to aid in the development of further international contacts and cooperation. Emerging directly from a symposium held in Montreal on the occasion of the Fourteenth International Congress of Psychology, it has been expanded through the initiative and foresight of the editors, Dr. Henry P. David and Dr. Helmut von Bracken, and the willingness on the part of many psychologists from many lands to join in the undertaking. The result is a credit to the editors and contributors, and a source of sincere gratification to the International Union of Scientific Psychology.

As MacLeod has noted, this international organization (the IUSP) was founded in 1951 in Stockholm on the occasion of the Thirteenth International Congress. Its first president was Professor Henri Piéron of the Collège de France and the Institut de Psychologie, Paris, and its first Secretary General Professor H. S. Langfeld of Princeton University. At the Montreal Congress three years later, Professor Jean Piaget of Geneva and Paris was elected president to hold office until the next Congress, which will be held in Brussels, Belgium, in 1957. It consists of twenty-one member associations from the following countries:

Belgium, Brazil, Canada, Cuba, Denmark, Egypt, Finland, France, Germany, Great Britain, Holland, Israel, Italy, Japan, Norway, Spain, Sweden, Switzerland, United States, Uruguay, and Yugoslavia. It enjoys consultative status with UNESCO and has been receiving from that organization a generous annual subvention which facilitates many of its activities, including the holding of meetings and congresses, such as the one in Montreal, of which this volume is a direct and significant result.

The International Union of Scientific Psychology statutes include, as one of the aims of the Union, the following article:

To contribute to the development of intellectual exchange and scientific relations between psychologists of different countries and in particular to the organization of International Congresses and other meetings whether general or specialized on subjects to be determined.

The present volume is a definite and important step in the realization of such intellectual exchange. In the name of the International Union of Scientific Psychology, it is a pleasure to record deep and sincere appreciation to all the contributors to this truly international undertaking, and particularly to the two editors for giving so freely of their time and energy and scientific competence in bringing this task to a successful completion. It is hoped that the precedent they have so ably established will be followed by others in the near future.

Otto Klineberg
Columbia University
Secretary General
International Union of
Scientific Psychology

| Editors' Note

AS THIS FIRST VOLUME of the International Union goes to press, we are happy to acknowledge: Gordon W. Allport's original suggestion of European Characterology as a topic for the Fourteenth International Congress; the support of the Program Committee led by Robert B. MacLeod; and the readiness of our colleagues to participate in a joint venture.

Much appreciation is due Henry W. Brosin, Director of the University of Pittsburgh's Western Psychiatric Institute, for generously arranging secretarial assistance. Similar support was subsequently provided by Jacques S. Gottlieb, Director of the Lafayette Clinic, Detroit. Manuscripts were typed and retyped by Phyllis Godin, Isabelle Hasenbank, Annette Lakatta, and Frieda Strauss. Rita Senf read each chapter and provided sagacious editorial assistance. Tema David assisted greatly through all phases of the planning and production process, providing much encouragement and support when editorial demands seemed particularly difficult or time-consuming.

René Wellek translated his brother's paper; M. D. Wall did the same for René Zazzo. Leo Candors aided in the translation of several manuscripts. The *Scientific Monthly* kindly granted permission to reprint portions of an article by Else Frenkel-Brunswik.

By unanimous agreement between editors and contributors all royalties will be paid directly to the Treasurer of the International Union of Scientific Psychology, for the express purpose of furthering international endeavors.

Within broad limits, individual contributors had complete autonomy in preparing their chapters, commentators were free

to criticize whatever they wished, including each other. While we must assume responsibility for final arrangements, we saw our task as primarily one of polishing translations, smoothing papers, and maintaining some sort of editorial consistency. Words were changed, but not their intent. The resultant divergencies in theory and method, at times strongly expressed, should appeal to all who seek fresh perspectives.

Trenton and Marburg
October, 1956

H. P. D.
H. v. B.

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Otto Klineberg (United States)

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Part 1

Overview

**European and
American
Theories of
Personality**

PERSPECTIVES

THE TITLE of this cosmopolitan volume is well chosen. Each successive chapter provides a fresh perspective on current theories of personality. Many lands and many points of view are represented. Since the international integration of psychological science is overdue, we should be grateful to the editors for preparing a volume that will help to hasten the process.

A precondition of integration is mutual understanding. Unfortunately, the course of understanding suffered a grievous setback during the era of depression, dictatorship, and war. We are only now making some recovery; but the recovery seems to me somewhat one-sided. On the whole, I suspect, European psychologists know more about current American developments than Americans know about European developments. If true, this is a curious situation, for a generation ago scarcely any American psychologist considered himself adequately trained until he had spent a predoctoral or postdoctoral year in Europe. Now the tables seem turned. European psychologists are visiting American shores in greater numbers than ever before, while

fewer American students go abroad for psychological training. Many of those who remain at home read neither French nor German nor any other European language. Most foreign books and journals that succeed in reaching our libraries remain on the shelves unsoiled and uncut. The saddest aspect of this provincialism is the rationalization that often accompanies it, "We have nothing to learn from European psychology."

I do not say that such smugness is universal in America—merely that it is more common than it should be. Nor do I imply that provincialism is unknown in Europe. Whatever the facts may be, of one thing I am sure: the present volume, because of its international reach, is timely. I hope it will be widely read, especially by younger American psychologists who have not had the benefit of study abroad.

My present assignment—and I am grateful to the editors for giving it to me—is to suggest, so far as I can, *some perspective* on the *perspectives* here presented. To do so it becomes necessary to compare theoretical developments in various countries, particularly to make comparisons between the Old World and the New. However, such comparisons involve grave danger. Recently we have lived through an era when alleged differences in national and racial character have been grossly exaggerated, to the detriment of international amity and scientific integrity. Certainly we must not make the same mistake today by exaggerating national and regional differences in theories of personality.

Thus, while national character is a dangerous concept, it still stands for some measurable truth.⁵ Indubitably there are national flavors in theories of personality. I wish that some public-spirited psychologist would make an accurate content-analysis of publications in different lands to discover what topics are most prominent, and precisely what theoretical conceptions and interpretations are most commonly employed. Lacking such empirical guidance we can only proceed with caution to make impressionistic comparisons.

Several of the authors in this volume have expressed opinions on this matter. Ellenberger, in comparing Switzerland and the

United States, writes "The dominant American view believes in the almost unlimited flexibility of the human personality, shaped by the life history and social influences. There is a great deal of emphasis on 'reactions to stress' and 'interpersonal relations'. In Switzerland there is more of a belief in the relative constancy of the basic character structure, sociology is not as fully developed, and rather more importance is ascribed to genetics, characterology, and constitutional psychiatry." The same point is made by Wolff, who draws on etymology to support his argument. Wolff contrasts the American preference for the term "personality" with the European preference for "character" and "characterology" (an "ology" seldom named in America). Americans, he concludes, are attracted to the *mask* implications (*persona*), and Europeans to the deeper implications of engraving (*χαρακτηρ*).

Shall we then say that by and large American theorists view personality in terms of outer behavior, surface attributes, motor components, interpersonal relations, and modifiability? Do Europeans, by contrast, adhere to concepts of deep disposition, constitutional determination, structural firmness, relative independence of society, and therefore relative unmodifiability? This tempting bifurcation, though it contains a kernel of truth, is certainly too broad. We find many exceptions. Why, for example, if America is motor and behavioristic, has it developed so little theory respecting expressive behavior? Would it not seem more logical, if Europe is "deeper," to find Europe preoccupied with projective methods, and America preoccupied with expressive methods? *In actual fact the situation seems almost reversed.* And why is it that the development of psychotechnology, which is surely motor, practical, and meliorative, is more advanced in Europe than in technological America?

Before we pursue the matter further let us take note of the protest made by Franks in his chapter on "Personality Theory in Britain." He objects strongly, and quite rightly, to painting all European theories with a single brush. There may be national trends, he thinks, but scarcely a single European trend certainly.

not if Britain is included in Europe. In his review of British developments he points out that, with a change of investigators' names, these developments could be considered fairly typical of what is happening in the United States. The same kinds of theories—psychoanalytic, factorial, positivistic, projective, and interpersonal—prevail in the two countries. Franks' statement of the case seems convincing; one should speak jointly of Anglo-American trends. David's excellent bibliography strengthens this impression.

Is it equally justifiable to speak of Continental trends as something relatively homogeneous and as appreciably different from Anglo-American trends? Ellenberger and Wolff give support to such a view, and the national surveys by von Bracken, Roser, and Zazzo depict features that are characteristic both of separate countries and of the western European Continent as a whole. While Wellek does not make his comparison explicit, it seems evident that he regards the phenomenological approach so typical of German-speaking (and other European) lands as quite distinct from the behavioristics and mathematical psychology found more often in English-speaking countries. Eysenck is clearly of the opinion that Anglo-American (what he calls "Anglo-Saxon") theorizing tends to be more "scientific," the Continental more "philosophical." This is an interesting assertion to which we shall return.

On the whole there does seem to be a constellation of trends that might be considered typical of Anglo-American countries and a constellation typical of the Continent—always admitting, of course, plentiful transnational borrowing as well as residual national characteristics. With some trepidation I shall venture to suggest what seem to me the distinguishing marks of Anglo-American and Continental theories respectively, drawing on evidence presented in this volume.

PHILOSOPHICAL ASSUMPTIONS

There is a basic difference in philosophical assumptions regarding the nature of mental life, the Lockean tradition being dominant in England and America; the Leibnitzian and Kantian

on the Continent. This statement, I think, is broadly true, in spite of extensive borrowings of theory back and forth across the English Channel.

The Lockean tradition, in brief, holds that man's mind by nature is *tabula rasa* (environmentalistic leaning); mind does what it is made to do (a leaning toward reactivity and behavioristics); its components are basically discrete (simple ideas), and its organization therefore a matter of cementing bonds (associationism). While not all these doctrines are fully developed by Locke himself, his particular brand of empiricism paved the way directly for Hume, Hamilton, Mill, and later for objectivism. Darwin gave the tradition a functional turn, and borrowing from Freud gave it depth. But the tradition remains clearly traceable.

By contrast, the Leibnitzian and Kantian positions have been dominant and, in my opinion, are still dominant on the Continent. They are clearly reflected in present-day characterology. To Leibnitz, as to Kant, the intellect was perpetually self-active (not merely reactive). When Locke said *nihil est in intellectu quod non fuerit in sensu*, Leibnitz gave his famous retort . . . *excipe: nisi ipse intellectus*. To him, the inner and spontaneous workings of the mind were at least as important as its content or productions. His concept of the self-active monad easily became the "person" who with his entelechive strivings pursued a unique destiny (cf. Stern's personalism). It was easy for such a unit to become differentiated into strata, the higher levels of which are bent on autonomy and self-actualization.

Parenthetically, let me speculate on the present popularity of "stratification theory" in Germany. As Lerseli and Gilbert show, the concept of hegemony or hierarchy in personality is nothing new. It is found throughout the history of psychology from Plato onward. But suddenly the horrors of the mass-man uncovered by Hitlerism focused attention on the lower "animalistic" strata of human nature. It thus became necessary to account for the baser as well as the more exalted aspects of personality. Stratification theory helps to do so while preserving all the essential features of a Leibnitzian outlook.

We may point to the consonance existing between this out-

look and the basic theoretical concepts of Gestalt psychology (closure, dynamic self-distribution, *Prägnanz*). We may point to the fact that the whole phenomenological approach is derived from the person's outward thrust into the world (not from his passive responses to stimuli). Activity, not reactivity, is the keynote of most Continental conceptions of personality.

While neither Kant nor Leibnitz was directly concerned with the nature-nurture controversy, it seems clear that by and large the emphasis on the constitutionally given (noted by several Continental contributors) fits more readily into this general tradition. Stratification theories start with the assumption that much, if not most, of personality is given. Kretschmer, Pende, and Le Senne do the same. But at this point a word of caution is in order. In England, too, there has been a strong genetic and nativistic tradition (Galton, McDougall), and an American (Sheldon) advanced and formalized Kretschmer's typology and won for it considerable acceptance in the United States. Yet, all in all, it seems safe to say that most American theories do not ascribe as large a role to constitution and native temperament, to inborn ability and disposition, as do Continental theories.

Not every Anglo-American theorist is a Lockean, and not every Continental theorist is Leibnitzian. But I am of the opinion that these two contrasting trends are still reflected in current theories of personality in the two regions, as well as in all basic psychological thought. I have argued this point at greater length elsewhere.²

thing to do. Yet with notable tenacity Continental theorists (and particularly the German) focus upon wholeness even while they engage in the task of analysis. Stratification theories are a clear case in point. They aim to differentiate, yet to retain the whole. The same goal marked the concepts of structure prevalent in the 1920's, reflected particularly in Stern's personalism, in Krueger's *Strukturbegriff*, and in Wertheimer's application of Gestalt concepts to personality, e.g., radix. Lewin's view of the person as a differentiated region is another example of having your whole and analyzing it too.

The school of *Verstehen* (which is not widely accepted or understood in Anglo-American countries) is a particularly bold attempt to preserve wholeness. To Spranger *Verstehen* means "to grasp events as fraught with significance in relation to a totality." And to this school of thought the "totality" of a person is largely a matter of his system of values. Therefore, to understand any single act one must locate it within the personal value-context of the individual life. Typologies pretend to cover (or nearly cover) the complete person. Finally, existentialism, referred to in this volume by Ellenberger and Buytendijk, places stress above all else on the acceptance of man's complete subjective experience as the point of departure and of return. While Germany is surely the principal happy-hunting ground for wholes, the movements here mentioned have had wide currency on the Continent, and by contrast, relatively little popularity in Anglo-American lands.

Candor compels us to say that most of these movements have met with suspicion, and occasionally with scorn, in England and in America. Yet, since the problem of wholes (organization) is inescapable, it is fair to ask how Anglo-Americans handle it. The question is too complicated to answer here in full; but we may hazard the assertion that associationism in one form or another is the fashion. One hears much about conditioning, integration, habit-hierarchies, and cell-assemblages. Associationism is certainly more alive in Anglo-American countries than on the Continent.

There is also in America a not infrequent attempt to deny

sonality has is said to be due to fixed cultural demands, to the stability of stimuli within the environment, or to the recurrence of interpersonal contacts. Extreme situationism of this sort is found in theories advanced by Coutu,³ by much that goes on under the name of "role theory,"¹¹ and in the writings of Sullivan who, for example, defined personality as "the relatively enduring pattern of recurrent interpersonal situations which characterize a human life."¹³ Thus, unity of personality is commonly regarded either as an associative phenomenon or else as an epiphenomenon of the constancies in the world of stimuli. (The reader will understand that I am not saying *all* American writers endorse these solutions.)

POINTS OF VIEW

A further difference lies in the tone of meliorism and optimism that marks most American approaches (less so, the British). By contrast there is a note of fatalism and pessimism in many Continental approaches. While the distinction I have in mind is especially clear in the practice of therapy, it is also prominent in theory.

Let me offer one or two examples: Freud—and this is virtually unquestionable—bequeathed to us a pessimistic view of the possibilities of human nature. A tyrannical Id, an obdurate environment, a second-hand super-ego; these oppressive instruments fashion us fatefully at an early age. The most significant changes in this Continental Freudianism, unless I am mistaken, have taken place chiefly under American aegis where so-called "ego psychology" has developed to shift the emphasis drastically. By ego psychology I do not mean merely an interest in defensive processes (Anna Freud), but the view that a person's conscious life, his rational capacities, and his acquired goals provide the "go" of his nature to a far greater degree than allowed for in orthodox Freudianism. In American neo-Freudianism culture is also more fully admitted as a formative and curative factor.

Or take the course of existentialism. Its stress on the acceptance of all truth, including all passions, conflict, guilt, unintelligibilities, hopelessness, could, I think, have developed only in Europe where the total, existential, suffering, and self-active man is the focus of attention. While none of the authors in this volume gives a sustained account of existential psychology it appears in nearly every paper as an overtone. Ellenberger and Buytendijk speak of the intricate consequences of this movement for "psychiatric phenomenology" taking form in the *Daseinsanalyse* expounded by Binswanger, Kuhn, Boss, and Blum.

What form does existential therapy take in the United States? It is, I think, most typically represented in the systematic work of Rogers who, like European existentialists, starts with the self-concept held by the sufferer. But far from remaining content with the exploration and description of this state, Rogers starts both his theory and his therapy with the changing self concept in relation to the patient's commitments and plans for the future. Here the therapeutic process gives a hopeful twist to existential "freedom." It is not a freedom doomed to fail when it encounters "no exit" from life's dilemmas. The air is one of expecting, encouraging, and discovering successful solution.¹⁰ I do not wish to imply that existential analysis in Europe is burdened with hopelessness, but I doubt that it has the incorrigible buoyancy of the American approach.

Tillich has marked this peculiarly resilient nature of American courage. "The typical American," he writes, "after he has lost the foundations of his existence, works for new foundations."¹¹ Tillich finds this response to the existential dilemma expressed in all the specifically American philosophies: pragmatism, process philosophy, the ethics of growth, progressive education, crusading democracy. He might have added all the lively forms of therapy as well, ego psychology, non directive treatment, guidance movements, counseling, and popular literature which produces an avalanche of books on peace of soul, maturity of mind, search for self, and on the power of positive thinking.

This passion for self-improvement in America (forty-eight

million adults are enrolled in adult education courses) must have some impact on the theoretical perspectives held by American psychologists. Might we hazard the opinion that both in America and in Europe theorists are, without fully knowing it, attempting to account for the types of "national character" most familiar to them? We have some evidence, for example, that college youth in the United States consider their highest value to be the development of a rich, full, well-rounded life; whereas in France, Germany, and Italy they place more emphasis upon intensity of inner experience and the formation of a definite character in spite of difficulties.⁴ It does indeed seem possible that theories of mutability, reactivity, and meliorism are more appropriate to the types of personality found in the United States; whereas theories of innerness, fixity, and stubborn integrity are a better fit in Europe.

SOCIAL INTERACTION

American theories normally allow for social interaction to a greater extent than do Continental theories. (In this comparison I shall not venture to include British theories.) The person, according to William Stern's definition, is "self-contained" but at the same time "open to the world about him." Most Continental theories, it seems to me, stress the self-contained quality of the person; most American theories his openness-to-the-world.

The American fondness for the interactional view no doubt rests on the pragmatic philosophy and "social self" bequeathed by James, Mead, and Dewey. This perspective is vigorously championed by sociologists who by professional necessity are forced to reject the proposition that personality is completely self-contained. Two sociologists, Parsons and Shils, for example, argue that the personality system is no more fundamental than the social system. Both systems are real enough, but we cannot gain complete insight into the personality unless we view the interlocking sets of roles played by the individual in his many

social relationships.⁸ A man's behavior is seldom, if ever, a function of simon-pure inner traits; it is rather a response to, and stimulus for, reciprocal behavior in others.

Working from a different perspective, but reaching analogous conclusions, F. H. Allport speaks of an "inside" and an "outside" view of structure. For example, we may say of a certain woman, following the inside view of her traits or trends, that she is always trying to be helpful; she is, in trait terms, a "generous soul." But this inside structure cannot manifest itself excepting in some outer event-structure; e.g., by taking a plant to a sick friend, by bringing cakes to a church supper, or by knitting warm garments for needy children. She can be herself only through the medium of social interactions. *But if taking the inside view of personality alone, i.e., viewing it as a stratified structure in its own right, is a hollow thing to do, taking the outside view alone is distinctly misleading.* There could be no social system without individuals possessing some memories, habits, traits, or other manifestations of internal structure. There could be no giving of plants, no baking of cakes, or knitting of garments, unless there were first a donor, baker, or knitter. While both the outer view and the inner view are essential, there is something altogether basic about the latter.¹ A sociologist might not like this reasoning but it comes natural enough to a psychologist, and particularly, if I am not mistaken, to the Continental psychologist.

At the moment there seems to be a strong tendency among American psychologists to favor the outside view. Increasingly, conceptualizations of personality seem to employ such analytical units as "role," "interaction" (Bales), or "insit" (Coutu's term for tendency-in-a-situation), or other outer-oriented units (such as "interpersonal relation"). In part this turn in theorizing results from experiments which show repeatedly how big the gap can be between an individual's alleged traits or needs, and his overt behavior which often varies sharply from situation to situation. This realization is clearly expressed in a statement made by Sears in his presidential address before the American Psychological Association in 1951, "There is no virtue in a descriptive

statement that a person possesses such-and-such a trait or need unless that statement is part of a larger one that concludes with a specification of a kind of action to be performed. To describe a person as having 'high emotionality' or 'low sensitivity' or 'diffuse anxiety' is systematically acceptable only if other variables are added that will, together with these internal personal properties, specify what kind of behavior can be expected from him under some specific circumstances."¹²

It seems fairly evident that this tendency to empty the person (at least partially) and to view personality as modes of social interaction appears far more readily where the Lockean tradition is strong than where the Leibnitzian tradition holds sway. Leibnitz's monads, we recall, had no windows. They went merrily on their way oblivious of society. While Continental theorists have certainly inserted windows, still the emphasis on the person as such—on his self-contained nature, on the "inside" system—clearly prevails.

It is in the context of this discussion, I think, that Thomae's proposal should be read. In his plea for more research on conditions that change human character he hypothesizes differing rates of change for different components of personality. The procession of social situations and demands alters some tendencies more than others. For those who wish to hold to the view of the inner system, this way of stating the problem will seem preferable to rushing headlong into a wholly interactional conception of personality. One thing, however, is clear: every theorist dealing with personality must take some sort of stand on this issue. The issue, as I have said, seems well expressed in Stern's twin defining phrases: the person is "self-contained" but "open to the world about him."

BRAIN MODELS

Anglo-American psychologists are currently more interested in "brain models" than are Continental psychologists. The paper

by Luthe in this volume is especially instructive in this matter. It is true, as Luthe's careful bibliography shows, that much of the painstaking research on neural physiology is European; it is likewise true that stratification theory (Lersch and Gilbert) specifically calls on neurological evidence to establish its case; yet the most vocal advocates of neurological speculation in which to anchor theories of personality live in America. In this connection one thinks of Krech, Klein, Tolman, Hebb, the cyberneticists, and others.

In general the neurological urge in Anglo-American psychology is traditional. The reflex arc, the switchboard analogy, a neurological image of the integrative process, have all been standbys, especially as sanctioned by Watson, Sherrington, and Hull. It is true that some movements have had little use for brain models, e.g., psychoanalysis, factorial studies, and certain ultra-positivistic approaches, such as represented by Skinner. At the same time, there is something congenial to Anglo-American psychology in assuming (and in searching for) neural equivalents of psychological processes. Special adulation is given to investigators such as Cannon, Lashley, and Penfield, who clarify the functions of the neurohumoral system and indicate its significance for psychology. It seems to be a special passion of Anglo-American psychologists to work with concepts that are operationally denotable, and a definable neurological or physiological process seems to satisfy this need. The strength of this passion for operational concepts is indicated in the present volume in the chapters by Franks and by Eysenck.

The difference I am describing here is only relative. There certainly are exceptions to the trend noted. Anderson's conceptual chapter, dealing with the "dynamic relating between the organism and the environment," states propositions that seem to apply equally well to biological and psychological growth. Some British and American writers have no use for speculative neurology and advocate a purely psychological psychology. On the other hand, some workers on the Continent, including stratification theorists, employ the evidence and the postulates of neuro-

physiological science. A major impetus in seeking brain models came to America through Köhler's conception of isomorphism—a clear case of importation. Yet, on the whole, the phenomenological side of psychophysical equation seems to offer greater attraction to Continental theories, the physical side to Anglo-American theorists.

METHODOLOGY AND CREATIVITY

The final, and clearest, comparison lies in the field of methodology. *The ideal of rigorous positivism seems to prevail in Anglo-American psychology to a greater extent than it does on the Continent.*

On this point we are indebted to Eysenck for his forthright chapter, "Characterology, Stratification Theory, and Psychoanalysis: An Evaluation." Eysenck flails mightily at "unscientific" characterology. In so doing he expresses the animus of many (but not all) Anglo-American psychologists. Eysenck wears no kid gloves, and does not expect those who disagree with him to wear them. He invites controversy; and controversy is the *sine qua non* of psychological progress.

Eysenck levels three charges at German characterology: He finds it obscure, philosophical and unscientific, and addicted to knocking down straw men.

To begin with the third charge—it is, I think, partially justified. Some Europeans show a certain condescension toward the New World. Specifically, in psychology, a professional villain occasionally is created who is a soulless mechanist, addicted to muscle twitches, mathematics, and raw meat. Usually the villain is American, but he can be British. I recall that in my student days in Berlin, in the early years of the Gestalt school, I was forcibly struck by the lecturers' almost universal habit of starting their discourse with a stabbing attack on Hume. As an elementarist and associationist Hume was considered the incarnation of intellectual evil. The portrait was exaggerated, basically a

caricature, but it served each lecturer's purpose. Similarly, American psychology was thought to contain nothing more than the primitive behaviorism of Watson. As such it was tossed overboard. Such oversimplification is, of course, regrettable since it destroys the possibility of fruitful detailed controversy. One cannot argue with a man of straw. Over-categorization (i.e., stereotyping) is the essence of prejudice. But at the same time let us admit that exaggeration of an opponent's position is a not uncommon device. It may even have heuristic merit.

Is the tendency to over-categorize all on one side? Do we not detect the same trend in Eysenck's indictment? His opening sentence reads: In recent years there has been growing up in Germany an approach to the problems of personality variously called characterology, stratification theory, or the phenomenological approach." He then proceeds to attack "the proponents of this viewpoint" on the three grounds mentioned above. Eysenck, I fear, is guilty of considerable over-categorization. Characterology, stratification theory, and phenomenology do not constitute a single viewpoint. There have been many varieties of characterology in Germany since Bahnsen first employed the term in his two-volume *Beiträge zur Charakterologie*, published in 1867. Stratification theory is only one of many brands of characterology. And phenomenology has only a slight overlapping relation with either characterology or stratification theory. Leading phenomenologists (e.g., Brentano, Husserl, the Gestalt psychologists) had no interest in either characterology or stratification theory. It is scarcely fair to lump the three perspectives into one.

What about the charge that some of the perspectives represented in this volume are vague and "philosophical" and "unscientific"? Such vagueness as exists is certainly due in part to the exigencies of translation. It seems peculiarly difficult to render German psychological idiom into English. But Eysenck means something more. He believes a perspective that is not "scientific" may properly be called "philosophical." Every reader, at least every Anglo-American reader, will immediately understand what he means, and perhaps sympathize with his contention.

There is, however, a logical pitfall in this line of reasoning. To limit science to a matter of currently fashionable method is an arbitrary thing to do. Etymologically speaking, *scientia* (like *Wissenschaft*) has a far broader meaning (viz., knowledge). When one says, as do Eysenck and Franks, that to be acceptable, statements about personality must be "scientifically established," one is acting as a philosopher—restricting knowledge to material obtained by a particular epistemological outlook (in this case, the positivistic). If there is a distinction between the German and the Anglo-American approaches it is thus between two philosophies (not between philosophy and science). Factorial units are no less philosophical than are the units of stratification, for both represent assumptions regarding the basic constitution of personality based on arbitrarily accepted postulates.

The paper by Franks sets forth in clear fashion "the more important criteria by which a truly scientific study can be recognized." It is useful to have this list and, no doubt, a good idea to follow it faithfully when it is relevant. The difficulty is that it is definitely restrictive in our search for good theories. It leads us carefully to skirt all questions about personality that are not answerable by an arbitrary methodology borrowed from natural science. The central bulky problems of personality will remain untouched by "science" if we are too niggardly concerning our conceptions of admissible procedures. The paper by Else Frenkel-Brunswik, and Eysenck's criticism thereof, illustrate well the point at issue. For all its inexactness Freudian theory certainly is, as Frenkel-Brunswik insists, the most fruitful single source of insight into human personality. Most readers, I suspect, will side with her on this point rather than with Eysenck's denial.

A somewhat more liberal construction of the scientific method is offered in McClelland's chapter, but here too the ideal is strictly upheld. All in all there is no doubt that we find insistence on "science" more common in Anglo-American than in Continental literature. But this fact does not mean that Continental theorists are blind to the prevailing standards set for scientific

communication Let me quote from the chapter by Wellek (whom Eysenck specifically attacks) "Not only can and should the phenomenologist satisfy the operationist by providing him with experimental and statistical evidence, but the operationist should also admit that his results, such as those from factor analysis, need the verification and interpretation of phenomenology" This conciliatory move on Wellek's part is unfortunately neither appreciated nor reciprocated by his critic Van Lennep's chapter on "Projection and Personality" is itself proof that phenomenology is not incompatible with strict method

The scientific ideal which we all share—though we may define it variously—has one serious charge against it. It has provided practically none of the substance for current theories of personality. To state the matter differently, Anglo American theorists, who are more exacting in methodology, are shameless borrowers They have created few basic ideas of their own (apart from method), and have appropriated the heart of their theories from their "philosophical" colleagues on the Continent. Let us ask ourselves what would be left in Anglo American theories if we removed the more fruitful typologies (e.g., Jung's, Kretschmer's, Spranger's)? Could we have built our extensive attitude research excepting on the foundations set by the Wurzburg school? Where does our current interest in perception and projective tests come from? Are not the basic psychometric and psychodiagnostic methods of Continental origin (Binet, Jung, Rorschach)? So far as we handle problems of expressive behavior, or develop theories of knowing other personalities, our concepts are importations Even our work on *small groups and interpersonal relations* owes most to the creative labors of Lewin He, as well as certain other innovators, became refugees in America, but this fact does not belie the European origin of their contributions Existentialism, now influencing American thought, is of Continental origin We are deeply indebted to Pavlov, Adler, Stern, Janet, Piaget, all of whom instituted fundamental ideas that were eagerly seized upon and developed by Anglo-American theorists Last, but not least, think of the cataclysmic

impact of Freudian theories of motivation, ego defense, and personality structure. Where would we be without them?

It would be difficult to attempt to trace the reasons for this difference in creativity. Is the longer and richer cultural history of the Old World responsible for it? Or is there perhaps a certain merit in the tradition of loose and "unscientific" thinking that provides new insights which later can be tested in countries having a harder empirical tradition? (It is interesting to note that Eysenck's own research has established the empirical validity of certain of Jung's and Kretschmer's insights.) On the whole it seems ungracious for western countries to hurl charges of vagueness and "philosophy" at those from whom they borrow so extensively in building their own theories.

In America the opposition between creative insight and scientific method has sometimes been expressed in contrasting the roles of "clinical" and "experimental" (or "statistical") psychology. Wyatt's chapter reflects how keenly the problem is felt. Another particularly poignant example is the recently published debate of a leading clinician with himself. In an autobiographical fashion Rogers sets forth his mental conflict (a true American dilemma). On the one hand, as clinician, he knows that important leads for theory come primarily, if not exclusively, from observing concrete personalities in action, giving special attention to their phenomenological worlds. On the other hand, he feels keenly the need for irreproachable, repeatable, operational methods. After setting forth an agonized account of the conflict, he states the conclusion he has reached in the following words: "Science is a way of preventing me from deceiving myself in regard to my creatively formed subjective hunches which have developed out of the relationship between me and my material. It is in this context, and perhaps only in this context, that the vast structure of operationism, logical positivism, research design tests of significance, etc., have their place. They exist, not for themselves, but as servants in the attempt to check the subjective feeling or hunch or hypothesis of a person with the objective fact."

In a very real sense Rogers' conflict with himself is but a miniature repetition of the conflict between perspectives of the Old World and the New. The solution he reaches, if widely adopted, might help resolve the international strain. Excessive methodological purity, as advocated by some Anglo-Americans, can result in bigotry and sterility. On the other hand, if fresh insights, phenomenological deliverances, and hunches are freely allowed, disciplined method can at the proper stage help sift the wheat from the chaff. We need ideas before we can apply rigor.

PERSONALITY AND GENERAL PSYCHOLOGICAL THEORY

The reader has surely noted that much of our discussion has dealt with general problems of psychology, not merely with the theories of personality. Many chapters in this book do the same. Why? It is because the specific condensation of human nature into discrete patterns of personality cannot proceed apart from the laws of mental life in general. Personality is only a special focus of interest within general psychological theory. Just as there are schools of psychology, there are inevitably corresponding schools of personality theory.

Indeed at the present time—at least in America—we need an explicit movement of protest against considering personality theories apart from general psychological theory. Klein and Krech, for example, view with disapproval such statements as "personality influences cognitive and motivational functions." To them, personality cannot be anything apart from these functions. One cannot speak of personality as though it were a secret and separate center which "issues outward into channels of learning, perception, cognition."

This line of reasoning helps to explain why in recent years the topic of perception has loomed so large in connection with research in personality. Klein argues that while a single process

is at work in learning, cognition, and motivation (in all phases of personality), this process can be most clearly traced in a person's habits of perception (his *Anschauungen*).⁶

Unless I am mistaken, a similar basic logic prevails in Europe. Interest in perception (phenomenology) is widespread, and no one seems to care whether the resulting research is regarded as a contribution to general psychology or to the theory of personality. The line is hard to draw. There are indications everywhere that people's perceptions (the *Anschauungen*, images, perceptual structurings) vary appreciably with their needs, interests, and values. Anxious people erect perceptual defenses or perhaps fail to perceive a threatening stimulus. People with strong values readily perceive objects related to these values. Prejudiced people tend to over-structure an ambiguous stimulus, thus betraying their basic insecurity. A person who is dependent in his contacts with other people proves to be similarly "field dependent" in his perceptual performance, while more active individuals free themselves of the outer context, and perceive objects independently of the field.¹⁵ This type of work is congenial today to theorists whether working in Europe or in America. Some prefer to regard it as general psychology, some view it as an aspect of personality research.

This may also apply to motivation. Is Nuttin's stimulating chapter a contribution to general psychology or to personality theory—or to both? He argues that since cognitive functions create a vast region of ideational relationships, these must enter into theories of motivation as fully as do the promptings of physiological needs. "The human personality," he writes, "consists of building up, progressively and by means of personal behavior, an individual constellation of ego-world relationships." Motives are "personal projects," peculiar patterns of ego-world relationships in a state of tension.

It seems to me that theories of this sort in the areas of perception and motivation mark an important forward step. It may soon be old-fashioned to oppose mind-in-general to mind-in-particular, that is to say, to separate psychology and character-

ology. General theories, we are discovering, are most acceptable when they allow for particularized operations. The day may come when psychological formulations will be regarded as invalid unless they are written to accommodate personal patterns of functioning, personal attitudes, and personal projects. A good general psychology will then be a theory of personality.

This trend, I feel, is the common thread running through the following chapters. While their perspectives diverge from one another in many respects, all are pointed to the discovery of principles that are consonant with general psychology on the one hand, and at the same time illuminate the function of those particular patterns of mental life that we call personality.

SUMMARY

Most of the basic ideas found in Anglo-American theories of personality are borrowed from Continental sources. At the same time Anglo-American research contributes much to the goal of precision and adds a desirable environmental and situational emphasis. While fruitful controversy, as reflected in certain chapters of the present volume, is beneficial, the genius of both regional trends is needed to achieve an optimal integration of psychological science.

Each chapter by itself makes a separate valid contribution and improves the reader's perspective on a many-sided subject. Taken as a whole the book is unique, stimulating, and historically important.

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Part II

**European
Trends**

II

**Personality Theory
in Germany**

THE TIES BETWEEN PSYCHOLOGICAL RESEARCH in Germany and other countries have now been reopened for mutual understanding and cooperation. However, we may well ask what has happened to German psychology during the past two decades and what is its current state?

This chapter will attempt to survey that part of German psychology which has been particularly controversial, *personality theory*. It is important, however, to set the stage historically. Therefore some effort will be made to review briefly the contributions of early pioneers, psychopathology, and typologies. Highlights of military psychology will be mentioned, followed by trends in phenomenology and the psychology of personality organization.

It is not the author's intention to present an exhaustive report on personality theory in Germany and related countries. Written primarily for American readers, this chapter will, for the most part, sketch some historical highlights, complementing the contributions of Buytendijk, Lersch, Gilbert, Thomae, and Wellek. American psychologists are well informed about such eminent scholars as Sigmund Freud, Kurt Lewin, and William Stern. I have, therefore, dealt only briefly with their work, stressing instead theories and developments less well known in the United States.

EARLY PIONEERS

At the beginning of the twentieth century the influence of experimental phenomenology, in the sense of Wundt's "physiological psychology," was strongly predominant in Germany.⁵ Nobody would have ventured to predict then that personality theory would reach the apex it has attained today—fifty years later.

While the origin of present-day German personality theory can no doubt be traced to earlier times, it is essentially a twentieth century product. To obtain a better perspective, however, it may be advisable to review its history during the past five decades.

German personality theory developed largely as a protest movement against Wundt. In fact, among his many accomplishments, Wundt's greatest success may have been in giving rise to a productive opposition. One wing of this opposition continued working in experimental phenomenology, e.g., the Berlin school of Gestalt psychology (Köhler, Koffka, Wertheimer); Selz, who advanced the psychology of productive thinking on the basis developed by the Würzburg school;⁶⁷ and Ach (Göttingen), who experimentally analyzed "determining tendencies" of psychic acts, particularly attention and will.¹

Of those who left the area of phenomenology two in particular distinguished themselves in the search for a basis for personality research: William Stern and Wilhelm Peters.

Stern (1871-1938) based his approach on Leibnitzian philosophy, rejecting the thesis of strict separation between mind and body (Descartes and Hobbes). He called his system "personalism"; and with his concept of man as a "*unitas multiplex*" attracted many supporters in Germany.⁷¹ As he turned from philosophy to psychology, Stern focused on developmental theories⁷³ and individual differences.⁷² This was in sharp contrast to Wundt's preoccupation with general principles and marked a considerable step forward for personality research. Whatever gap still remained between Stern's philosophical and psychological views was successfully bridged in his last volume.⁷⁴

Peters, born in 1880, came to personality research by way of the biological sciences, and has made numerous contributions to many areas of psychology, particularly those of perception and education. His early work on heredity was of considerable historical importance, since it introduced rigorous statistical methods to comparative studies of the school records of children, their parents, and grandparents.⁴⁹ His volume on the inheritance of mental traits and psychic constitution⁵⁰ was remarkable in three respects: First of all, Peters considered research studies from both German and non-German speaking countries to a far greater extent than did his colleagues at the time; secondly, his approach was a critical one, focusing on the psychological aspects of heredity, but not neglecting environmental influences; and thirdly, he showed that effective hereditary factors do not correspond to psychological traits (in Allport's sense). The personality structure reached by diagnostic tools develops from the interaction of hereditary factors, "dispositions due to experience," and environmental stimuli.

It is hardly necessary to give a detailed account of how Freud and his school refuted the Cartesian concept of psychology as the study of consciousness. It may be of interest, however, to sketch briefly the reverberation of Freud's theory of unconscious psychic processes in German speaking countries. His emphasis on sexuality was perceived with quite a shock, with some limited acceptance in a few medical and literary circles; at present his theory has become more widely known. The most prominent Freudians today are Bondy (*Hamburg*), Bitter (*Stuttgart*), Mitscherlich (*Heidelberg*),⁴⁵ and Müller-Braunschweig, one of the German pioneers of psychoanalysis.⁴⁴

Adler's views received a somewhat wider acceptance at first, especially among progressive educators. While some of this influence has persisted,⁴⁵ it never really recovered from the blow sustained when Adler's books—as well as those of the Freudians—were outlawed and burned by the Nazis.

Jung's small number of German followers place great emphasis on the metaphysical and romantic elements of his theory.

Political events left this group more or less unchanged in its membership.

Until the middle of this century most German psychiatrists and neurologists preferred Kraepelin to Freud. When Kraepelin's views began to resemble those of Wundt, however, many of his followers refused to go along. Gruhle, Hellpach, and Störring continued as his followers with some qualification; others, such as Bumke and Schneider, developed approaches of their own; the neurologist Goldstein worked closely with the Gestalt school.¹³

Wundt's concept of psychology was not a very fruitful one for psychiatry. Psychiatrists, who saw man in a somewhat different light, recognized that mental disturbances were not merely disorders of consciousness, but constituted an illness of the whole personality. This awareness became systematized in psychopathology and was applied to psychological problems. "Medical psychology" was established, e.g., by Kretschmer,³² and by similar efforts of some physicians such as Brugsch and Kraus. Stratification theory and typologies received attention first in the neurological and psychopathic clinics of German universities; their growing popularity forced the comparatively small and modest institutes of psychology to give them serious consideration.

TYPOLOGIES

There had been many typologies prior to Kretschmer's; why was his so successful in German speaking countries, contributing so much to research? Was it the psychopathological reality of Kretschmer's types, his skill in presenting theories, or his empirical evidence?

Twenty-two editions have been printed of Kretschmer's book *Physique and Character*,³¹ most of which incorporated some revision or improvement.¹¹ Some time ago he added a third type, the "*athletisch-viskös*," which corresponds to Sheldon's "somatotonic-mesomorphic" type. In Germany Sheldon's findings are accepted as corroborating those of Kretschmer.

Kretschmer has, however, long since given up his assertion of a specific relationship between physique and character, focusing instead on the study of "temperament," as suggested to him by the critique of Allport.² Even more important is the fact that detailed chapters on physiology, experimental psychology, psychology of achievement and criminality, family research, and genius have been added. More than one-half of the latest edition reports on empirical research generated by Kretschmer's typology.

Other scholars have also been stimulated to search for new types. Among such contributions looms the work of Ach,¹ Spranger,⁷⁰ Sander,⁶¹⁻⁷⁸ Ehrenstein,¹⁰ Jaensch,²⁴ and Pfahler.⁴⁷ While at first Jaensch did do some valuable research on this matter, his later political typological efforts found little support, even in Hitler's time.²⁵ Pfahler's types, however, are more distinct and plausible; they are based on the assumption that emotional responsiveness, attention, and "vital energy" represent fundamental inherited functions which form the basis for personality development. The empirical evidence seems to be supportive,⁹ in a recent publication he successfully related his theory to Freud's findings.⁴⁸

Spranger's types are more philosophical, necessitating an understanding of Hegel's teachings. His types represent attitudes toward segments of civilization and distinguish between individuals on the basis of their "values," as described in the United States by Allport.³ Oelrich has recently summarized Spranger's "*geisteswissenschaftliche*" psychology.⁴⁹

Although typologies have been very popular in Germany in the past, they have recently lost much of their attraction. The center of interest has shifted to personality organization, a development stimulated in part by the work of Klages.

THE CHARACTEROLOGY OF KLAGES

The term "characterology" was first used by Bahnsen who along with Nietzsche was influenced by Schopenhauer. It is no

mere accident that Klages utilized Bahnsen's term; there is a close relationship between his theory and the romantic-antiration-alistic philosophies of both Schopenhauer and Nietzsche.

Klages' personality theory represents a classification of traits, discriminating between matter, especially abilities; interests; and structure or stratification, particularly temperament.²⁹ In addition Klages considers "tectonic traits" (e.g., maturity or immaturity) and the "effects of character on society" (e.g., loyalty or trustworthiness).

There is still another metaphysical schema that is pertinent to Klages' system—the separation of man into "mind" and "soul." By mind Klages means something similar to Freud's super-ego; soul corresponds roughly to the id. When speaking of soul, however, Klages does not refer to sensual desires (much less to sexuality); rather, he emphasizes romanticized feelings and interests. In his major volumes on metaphysics he explains how the soul is enslaved by the mind.³⁰ While this theory attained considerable popular appeal in Germany, Klages' depreciation of intelligence and science was vehemently attacked by such scholars as Witte.³¹

Prior to his work on metaphysics, Klages had achieved acclaim through his contributions to graphology.²⁸ He introduced the principles of expression and representation, and although not developing graphology to the present day level of scientific psychological testing, he achieved considerable diagnostic success.³¹ Bobertag's rigorous follow-up evaluation of expert testimony by German graphologists yielded considerable confirmatory evidence,⁴ quite in contrast to similar American studies. This discrepancy may have resulted from Klages' great emphasis on the difference between a subject's handwriting and the "model" he used when learning penmanship. In the first decades of this century such models were probably far more standardized in Germany and France than in the United States.

PSYCHOLOGY IN THE ARMED FORCES

There is no unanimity in accounts of the short history of the German military psychological services. There may not be too much opposition, however, to the assertion that from the late nineteen-twenties on, "character" was considered of major importance for the future officer. How was such "character" to be assessed? Rieffert, who headed *Reichswehr* psychology before 1933, had developed the technique of observing a subject's expressive movements while performing a specific structured task (e.g., giving orders to a group of soldiers). Rieffert had also devised categories for judging personality from speech;⁸⁷ similarly, Lersch had analyzed facial expression,⁸⁷ and Strehle movements of the body and extremities.⁷⁵

Simoneit, who became chief of the Army Psychological Service in the early thirties, constructed a personality theory which encompassed considerable phenomenology; personality traits were defined as "individual shadings of psychic states."^{88, 89} But how could such states be diagnosed? The psychologist had to use empathy and a special sort of understanding, which Simoneit called "*Urverstehen*" (a more emotional kind of understanding). He recognized, however, that this was not the safest procedure and could, at best, offer only certain assumptions. For more adequate assessment there was a need for different methods of observation, experimentation ("situational tests"), thinking, and "rational understanding." The major part of Simoneit's volume deals with these procedures.⁶⁹

As World War II deteriorated, Hitler abolished the Army Psychological Service. In the Navy, where Mierke and Müller had carefully controlled the validity of their specialists' tests, the psychological service functioned until the end of the war.

POSTWAR PHENOMENOLOGY

Personality psychology has continued to gain ground in Germany. It would be erroneous, however, to give the impres-

sion that German psychology is presently more or less uniform. There is diversity both in theory and in method; nor is everyone concerned with personality problems.

The term "phenomenology," for example, encompasses two concepts. There is the definition, well known in the United States, of phenomenology as that branch of psychology which deals with the phenomena of consciousness, i.e., thinking, remembering, perceiving, etc. Since phenomenologists of this sort, in most countries, prefer the experimental method, I shall refer to this area as "experimental phenomenology."

In his chapter in this volume Wellek uses the term phenomenology principally in quite a different sense. The kind of phenomenology, excellently described by both Wellek and Buytendijk, constitutes a special technique; I shall refer to it as "phenomenological method." From Wellek's chapter one might gain the impression that all German psychologists have adopted a phenomenological method, or pure "understanding" as Eysenck calls it. In actuality, however, quite a number of German psychologists are opposed to this approach; most prefer to work with techniques similar to those used by their colleagues in other lands. The phenomenological method serves more to develop new hypotheses than new truths, something that may perhaps be in higher esteem in Germany than elsewhere.

Considering the rise of personality theory, one may wonder about the fate of the older German schools of experimental phenomenology. In the twenties there were primarily three: the Berlin school of Gestalt psychology (Köhler and Wertheimer); the Leipzig school of "*genetische Ganzheits-Psychologie*" (Krueger); and the Göttingen school of experimental will psychology (Ach).

The Göttingen approach has always been close to personality psychology. The two former Ach students currently serving as professors of psychology in German universities, Düker (Marburg) and Mierke (Kiel), have not changed their main direction. Mierke has published a book on "will and achievement," using personality tests to clarify, for example, how the

achieving personality is motivated.⁴² Similar work was reported by Fuchs, Duker's student.⁴²

The work of the Berlin school has been well summarized in Metzger's standard text on German Gestalt psychology.⁴¹ In the second edition there are a few connecting references to personality problems, e.g., from the "Zentrierung" phenomenon to different weights of personality traits. Von Allesch published a theory of personality traits.³⁹ Gottschaldt (East Berlin) attempted to demonstrate, by means of twin studies, a Level theory of the relative importance of heredity and environment,⁴⁴ and similarly studied deprived children.⁴⁵ Also, Kurt Lewin, who in the nineteen twenties taught at Berlin University and was narrowly connected with the Gestalt school, developed a personality theory well known the world over. At present, however, there is a strong tendency in German Gestalt psychology to continue the original Kohler-Wertheimer approach of experimental phenomenology. Besides Metzger (Munster) and Von Allesch (Göttingen), Witte (Tübingen) and Rausch (Frankfurt) are outstanding representatives of this trend.

Krueger's Leipzig school was especially close to personality theory, and not by chance. Krueger and Spearman collaborated on one of the first papers on factor analysis.³⁴ Whereas Spearman delved further into factor analysis, his German colleague developed the concept of personality structure.^{35 36 37} (Allport, in his famous book on personality, specifically uses the term "structure" in Krueger's sense.) Krueger's thoughts ranged widely, and it remained largely for his students, Rudert (now Heidelberg) and Wellek (now Mainz), to further refine their teacher's concepts.

Rudert and his co-workers applied Krueger's theory of emotions to problems of expression,⁶² especially writing, drawing²³ and speaking. He also dealt with personality traits, and published a psychological theory of the German "Gemüt".⁶¹

Wellek studied the experimental phenomenology of hearing,⁸⁵ and then turned to investigations of types. He distinguished a "polar" and a "linear" type of hearing, related to certain kinds

of music: polar to harmony and linear to polyphony. Observing Germans in different parts of the country, he found the linear type more common in the north, the polar type more frequent in the south.⁸⁸ Later he worked in the area of personality psychology, including the logic of types⁹⁰ and the organization of personality.⁸⁸ His chapter in this volume cites further studies.

There is even further diversity in German psychology, all of which cannot be summarized here. There are Hellpach's (1877-1955) many contributions to personality theory and research, e.g., the varied physiognomies prevailing in different parts of Germany,¹⁸ the physical¹⁷ and social¹⁹ determinants of personality, and his excellent biography of Goethe.²⁰ There is Busemann, a leader in developmental and educational psychology, who studied the effects of environment,^{6, 7} and investigated the relationship between speech style and personality.⁸

Much else should be mentioned here but we can only refer the reader to the reviews published by Schreiber,⁶⁶ Meili,⁴⁰ Prinzhorn,⁵¹ Helwig,²¹ Remplein,⁵⁵ Revers,⁵⁶ Wellek,⁸⁹ and von Bracken,⁶⁰ as well as to current journals.^{43, 52, 53, 58, 92, 94}

THE PSYCHOLOGY OF PERSONALITY ORGANIZATION

Personality psychology may be roughly divided into three branches: personality research; applied studies in the clinic, in industry, education, etc.; and personality theory. All three areas are flourishing today as never before in Germany. There are many interrelationships and much cross-fertilization; personality theorists particularly are in close contact with both basic and applied researchers.

In the area of personality theory we have already noted two major trends: the work of the early pioneers Stern and Peters, and the typologies. While Klages' characterological and meta-physical volumes were by no means scientific, they did contain numerous hypotheses for the study of personality and its organ-

ization. Two primary theories were developed: "*Schichten-theorie*" (the theory of stratification or levels); and what I would like to call "kinetic theory."

Since stratification theory is well described in this volume by Lersch and Gilbert, I shall confine myself to a few remarks. Stratification came to the fore in 1938 when the books by Rothacker⁵⁹ and Lersch⁵⁸ were published within a few weeks of each other; but it did not originate in the thirties. As Gilbert noted, some of the early Greek philosophers were concerned with personality levels. It seems to me, however, that Plato's famous parable of the chariot driver and the two horses is more related to eighteenth and nineteenth century faculty psychology than to stratification theory. Aristotle's "bottom to top" model may be a more pertinent predecessor.

The psychological stratification theory of the thirties had a new twist. The difference might well be compared to that between the metaphysical atomistic beliefs of old Greece and the scientifically well rooted atomic theory of modern physics. Of course, Rothacker and Lersch were unable to muster a similar body of evidence, but they tried to demonstrate that the ancient idea of stratification was appropriate for organizing the diverse facts obtained by modern psychological research, and for developing fresh hypotheses for further study. Indeed, Rothacker was able to report some supportive studies in new editions of his text. Kroh stated the importance of stratification for ontogenetic problems, particularly in child psychology.⁶³ Keilhacker⁶² and Remplein⁶⁴ worked in the educational area. Von Bracken tried to apply stratigraphic principles to the psychology of geriatrics.⁶¹ Schäfers⁶⁵ and von Bracken⁶⁶ attempted to gain deeper insights into the manifold relationships between the individual and his environment. Strunz published studies on the criteria for distinguishing between upper and lower levels;⁶⁷ he found that degree of consciousness or of flexibility by environmental forces was less useful than Rothacker's preferred genetic criterion; that is, asking primarily what is phylogenetically younger or older. Stratification theory has often been criticized as too rigid in

its conception of personality. Indeed, the model of "strata" or "levels" is in itself quite fixed. Stability of personality is emphasized by some German personality psychologists, among them Simoneit and the typologists. But, as Kelly, for example, recently observed, human personality—as measured by clinical instruments—does change.²⁷

In psychological diagnosis it is a known fallacy to consider a person too stable. In their Rorschach studies my Braunschweig colleagues Thielitz and Franke found that even minor degrees of fatigue affect not only peripheral parts of the personality but may also induce early signs of disintegration.^{82, 83} If stratification is not considered in too rigid terms, these findings may not contradict the theory, but they do surpass by far the original concept of the stratigraphic model.

German psychologists soon began to explore problems connected with personality change. Heiss pioneered the view that while there was something stable in personality—it may be called "character"—important aspects were more or less flexible.¹⁶ Personality in its entirety was considered only "*schwebendes Gleichgewicht*" (suspended equilibrium), a notion also supported by Rudert.⁶³ After the war, Heiss's theory stimulated interesting laboratory studies.²²

Thomae (Erlangen) published an excellent book pointing in a similar direction, but emphasizing to an even greater degree the sequential aspects in personality development over one's total life time.⁷⁷ He called his approach "dynamic," but I would prefer the term "kinetic." His views are not confined to Germany; there are outstanding proponents in the United States. Although, as this volume suggests, the influence of kinetic theory is not as widespread as is stratification, its scope is steadily growing.

SUMMARY

Theories are useful only insofar as they integrate past research and stimulate future investigations. In Germany in the

thirties there was considerable temptation to replace research with theory

Today leading German psychologists welcome the opportunities for cooperation offered by many helpful colleagues abroad, they want to learn about recent developments in psychological research and methodology, and are encouraging their students to do the same

In this brief survey I have tried to present some aspects of the diversity in German psychology, its historical roots and current perspectives. What is universal about present-day German psychology is the strong impetus to be informed about on-going research abroad, to understand the aims of colleagues in other lands, and to utilize the fruits of psychological progress everywhere

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III

**The Scope of
Swiss Psychology**

THE SUDDEN, RAPID, and extensive development of psychology in Switzerland presents a unique phenomenon of scientific evolution and cultural mutation. Within a few decades psychology has invaded the various fields of life: education, religion, industry, law, social customs, and institutions, resulting in an ever growing awareness of the implications of varied facets of human behavior. This deep penetration of psychology into life and culture has not only increased our knowledge of human personality, but also transformed human personality itself to a hitherto unknown extent.

While this cultural revolution was not limited to Switzerland, it was more remarkable in that country because it started relatively late and was largely unforeseen. Once begun, however, it was more rapid and more complete, which makes its study particularly rewarding. This chapter will attempt to sketch cultural and historic backgrounds, describe the impact of psychology and psychiatry upon Swiss life and institutions, and consider the rise and present status of psychoanalysis, as well as Jung's position, and new trends in phenomenology and existential analysis. I shall conclude with a discussion of the development and role of the psychology of expression and projection, and the rise of

vocational psychology. Throughout, an effort will be made to consider differences in American and Swiss approaches to the manifold study of personality.

CULTURAL BACKGROUNDS

Until the end of the nineteenth century Swiss culture largely evolved around three independent centers of philosophical activity. The oldest of these was Basel, a city renowned for its Renaissance humanism. There Erasmus made his home, and Felix Platter (1536-1614) pioneered in psychiatry. It also produced the philologist Bachofen (1815-1887), who promoted the hypothesis of matriarchy; Jacob Burckhardt (1818-1897), the great cultural historian; and, more recently, Heinrich Wölfflin (1864-1945), reviver of the history and psychology of art. Basel had a tradition of excellent scholarship allied with highly original thought.

At the opposite end of Switzerland was Geneva, center and bulwark of the Calvinist Reformation, the birth place of J. J. Rousseau and of a number of naturalists, linguists, and economists. Its cultural tradition placed especial emphasis on educational problems.

Somewhat later than Basel and Geneva, Zurich was recognized as a center of the movement for enlightenment. One of its representatives, J. C. Lavater (1741-1801), invented a method of physiognomy and became the ancestor of *Ausdruckspsychologie* (psychology of expression). Another of its citizens was Heinrich Pestalozzi (1746-1827), famous philanthropist and reformer of education. Zurich's cultural tradition was primarily moral and humanitarian.

These local traditions furnished the characteristics which were strongly stamped into Swiss psychology from its very beginnings: a rational approach, respect for the learned professions, humanitarian trends, interest in education, and a practical orientation to the study of man.⁹

SWISS PSYCHIATRY

Although two outstanding sixteenth century psychiatric pioneers, Paracelsus and Platter, were Swiss, interest in psychiatry arose very late in Switzerland. The first asylums were founded in the middle of the nineteenth century, but for a long time psychiatry was taught by German professors and many Swiss asylums were operated by German psychiatrists.

An independent Swiss psychiatric school with high standards was founded at the end of the nineteenth century by Auguste Forel (1848-1931). A life-long student of ants and an extremely versatile genius, Forel distinguished himself in the fields of brain anatomy, hypnotism, forensic psychiatry, psychiatric education, and the public teaching of mental hygiene. In 1879 he was appointed professor of psychiatry at the University of Zurich and director of the Burghölzli (the Zurich psychiatric university clinic). He transformed this then backward institution into a scientific center of world fame. Through his personal example, his writings, and his teaching, he re-emphasized the principle of the psychiatrist's social functions and duties.¹³

It was the good fortune of Swiss psychiatry that Forel found a successor worthy of himself, perhaps even his superior—Eugen Bleuler (1859-1939). Bleuler continued the work of Forel with the same ethical and social principles, while emphasizing more practical methods. He introduced new techniques for the detailed study of patients, adopted fresh ideas, and elaborated mountains of well-established facts into vast syntheses.¹⁴ This may

Bleuler thus imbued Swiss psychiatry with a strong psychological emphasis, as opposed to the organic approach which had previously prevailed

Forel and Bleuler directed the Burgholzli for fifty years, and were in a position to endow Swiss psychiatry with a durable body of traditions and teachings. Indeed, they created a new type of Swiss psychiatrist whose main characteristics include enormous industry, a passion for detailed data gained from intensive observation, a differentiated psychological approach to the patient and to the disease, keen interest in forensic psychiatry and criminology, high professional ethics, and a strong sense of social duty. Through their efforts psychiatry ceased to be an esoteric science incomprehensible to the layman, and instead grew in influence far beyond the limits of medical circles.

After these two great pioneers, Swiss psychiatry continued to grow and expand, particularly in the fields of social and child psychiatry. In 1920 Hans Maier, an associate of Bleuler's, opened at the Burgholzli the first *Kinderbeobachtungsstation* (child observation home) for the study of problem children. These institutions became as typical of Swiss psychiatry as child guidance clinics in the Anglo American countries. Each home evaluates about eighty to one hundred children yearly, every child is carefully observed and examined for three to four months. As illustrated by the work of Tramer,⁴² Lutz, and Bover,⁴³ child psychiatry has continued to develop remarkably.

There has also been an unparalleled extension of forensic psychiatry and reforms in the penal code, expounded by Forel. Swiss civil law now requires a psychiatric report for such cases as prohibition of marriage due to feeble-mindedness or psychosis, divorce because of mental illness, court ordered appointment of a legal guardian, etc. Most delinquents must also be given a psychiatric examination. Since Swiss forensic reports are generally quite exhaustive and are prepared with extreme conscientiousness it is not surprising that some mental hospitals have psychiatrists who devote full time to this service.

The 1938 Swiss Penal Code was probably the first to pro-

claim the principle that "the application of penalty in prison or penitentiary shall have an educative value and prepare the prisoner for his return to civil life." As a result efforts were made to individualize penalties, separate varied categories of convicts, teach new occupations, supervise and assist prisoners after discharge, and extend psychiatric and social services. Most important, perhaps, was the gradual development of a new kind of judge—a judge-psychologist, well acquainted with pertinent psychoanalytical and psychological literature, who studies forensic psychiatric reports in detail, and considers the social-psychological as well as the legal aspects of each case.

A further characteristic of Swiss psychiatry is the intensive interest in follow-up studies, taking into consideration both familial and social aspects of different problems, such as the effects of certain operations (castration, sterilization, interruption of pregnancy), problems of unwed mothers,² children of divorced parents, etc. (Incidentally, marriage counseling is for the most part a psychiatric specialty in Switzerland.) The war and its aftermath also produced increased participation by psychiatrists in the study and care of prisoners of war, refugees, orphans, etc. Indeed, there are few countries in the world where psychiatry permeates the entire culture so thoroughly from educational problems to the administration of justice.

SWISS PSYCHOLOGY

If Swiss psychiatry was born in Zurich in 1880, Swiss psychology was born in Geneva about ten years later. Its two great pioneers were Théodore Flournoy (1854-1920) and Edouard Claparède (1873-1940).

After studying experimental psychology in Leipzig with Wundt, Flournoy introduced this science in Switzerland. Appointed a professor of psychophysiology at the University of Geneva in 1891, he demanded that this new chair be annexed to the Faculty of Sciences instead of the Faculty of Philosophy,

thus stressing the purely scientific character of psychology. Nor did he content himself with applying experimental methods to the usual fields of psychological research; he was also deeply interested in the psychology of religion and in parapsychology. His book, *Des Indes à la planète Mars*, is one of the best investigations of the unconscious prior to early psychoanalysis.¹²

Claparède, the cousin, pupil, collaborator, and successor of Flournoy, continued his work with the same methods of scrupulous observation and experimentation. Although he was one of the founders of the experimental psychology of testimony and of judicial psychology, his primary interest lay in establishing a scientific pedagogy. His *Psychologie de l'enfant*, published in 1905, was a milestone in the history of child psychology.⁷ In 1912 he founded the Institut Jean-Jacques Rousseau, later called *Institut des Sciences de l'Education*, and now incorporated into the University of Geneva. The Institute has become a world famous scientific center for the training of special educators and for research in the fields of child psychology and experimental pedagogy.⁸

Pierre Bover, the first director of the Institut Jean-Jacques Rousseau, and his successor Jean Piaget, have done outstanding work in this field. Originally a logician, Piaget endeavored to elucidate the nature of logical operations by detailed reconstruction of their development in the child, using the genetic method. This attempt crystallized into an extraordinarily thorough and systematic study, which has now been in progress for more than thirty years. The results have been expounded by Piaget in a dozen very important books and in many articles.²³⁻²⁶ Whereas in the United States Gesell and his school investigated the motor and behavioral development of the child, Piaget was primarily concerned with reconstructing the child's conception of the world and his intellectual functions.

Swiss pedagogy, inaugurated by Rousseau, Pestalozzi, and the reformers, and placed on a scientific basis by Claparède and the Geneva school, was further enriched by the contributions of such psychoanalysts as Pfister,²⁷ Zulliger, Schneider, and Meng.²⁸

After World War I, when the focus of pedagogic interest shifted to the problems of the emotionally disturbed child, great strides were made through the efforts of Heinrich Hanselmann who initiated a highly efficient system of *Heilerziehung* (therapeutic education). An eclectic and empiricist, he took from Claparède, Freud, Adler, and others what seemed to be of most practical value. He established a training center for special-teachers in Zurich, built a model institution, and wrote a standard textbook on therapeutic education.¹⁴ In this way he greatly influenced the development of public school teachers, creating a new type of educator, a combination of teacher, psychologist, and psychotherapist, prepared to deal with the problems of emotionally disturbed children.

PSYCHOANALYSIS:

BEGINNINGS AND TRENDS

After the birth of Swiss psychiatry and psychology, the third important event was the adoption of psychoanalysis. It was doubly decisive, both for Swiss psychology and the fate of the psychoanalytic movement.

By 1906 Sigmund Freud had been publishing material about his psychoanalytic method and findings for ten years. Outside of a small group of friends and former patients, however, his ideas had been ignored or rejected. At this point, he was not a little surprised to hear that they had been acknowledged in Zurich by the well-known Professor Bleuler and his associate at the Burghölzli, C. G. Jung. In Geneva, psychoanalysis attracted the attention of Claparède and his group of psychologists. Thus Switzerland was the first country in which psychoanalysis was accepted in influential university circles. Soon after there were several important extensions of its fundamental concepts.

The first development was the application of psychoanalysis to the field of mental diseases. Whereas Freud had limited his study to the neuroses, Bleuler and Jung applied his concepts to

the psychoses, hoping to find a means of comprehending the supposedly "absurd" and "senseless" symptoms. In 1907 Jung's little book, *On the Psychology of Dementia Praecox*, brought the first stone to the edifice of a psychoanalytic psychiatry of psychosis,³⁷ which eventually culminated in the publication of Bleuler's famous volume on schizophrenia.⁴

Meanwhile, an association of Swiss psychoanalysts had been formed in Zurich, including such men as Bleuler, Jung, Maeder, Pfister, and Binswanger, who soon began to enlarge considerably the scope of psychoanalysis. The Protestant minister, Oskar Pfister, was the first to apply psychoanalysis to education of normal and abnormal children, and to interpret the deep psychological meaning of play.³¹ His work in this field was continued by the teacher Hans Zulliger, who performed outstanding analytic work with difficult children.⁴⁴ Pfister was also the founder of the psychoanalytic "cure of souls" and the first to study the manifestations of morbid religiosity and mysticism with the help of Freudian principles.^{30, 32} Another of the earlier Swiss analysts, Arthur Kielholz, worked with a variety of delinquents and psychopaths, laying the foundations for an analytic criminology.⁹

Thus, Switzerland played a fundamental part in the history of the psychoanalytic movement. Many basic aspects, such as the obligatory training analysis, were introduced by early Swiss analysts. Unfortunately, however, the initial impetus was greatly retarded by the defections of Bleuler and Jung, and by the dissolution of the Swiss group from 1913 to 1919. After reconstitution Switzerland never quite caught up, in certain respects, with the international movement. For example, there is no Swiss Psychoanalytic Institute. Several of the foremost practitioners are lay analysts, including Pfister, Zulliger, and Madame Sechehaye. Still, it may be said that although there is comparatively less "orthodox" thinking among Swiss analysts, the influence of psychoanalysis seems to have permeated everyday life to a far greater extent than elsewhere.

It may also be appropriate at this point to consider briefly

several differences between Swiss and American views. For example, in Switzerland psychoanalysis is ordinarily called "*Tiefenpsychologie*" (depth psychology), rather than "dynamic psychology," a term preferred in the United States. This is probably more than a linguistic peculiarity. The word "depth psychology" refers primarily to the unconscious and its expression through dreams, parapraxias, etc., whereas "dynamic psychology" is mostly concerned with ego conflicts and defenses.

Another difference stems from the varied conceptual approaches. The dominant American view believes in the almost unlimited flexibility of the human personality, shaped by the life history and social influences. There is a great deal of emphasis on "reactions to stress" and "interpersonal relations." In Switzerland more attention is given to the relative constancy of the basic character structure, sociology is not as fully developed, and rather more importance is ascribed to genetics, characterology, and constitutional psychiatry. There is much emphasis on pertinent studies in comparative psychopathology, physiology, and biology, such as those of Hediger,¹⁵ Hess,¹⁶ and Portmann.³⁷ As reported elsewhere,^{9, 11} many attempts have been made to synthesize psychoanalysis, either with biology (Meng, Brun, Bally), or with existential analysis (Boss, Blum), or with Piaget's genetic psychology (De Saussure, Odier). Although the Swiss firmly believe in a nucleus of innate, immutable capacities for each person, whether for good or for bad—as contrasted to the primary American view of unlimited individual flexibility—the paradox remains that Swiss education is highly successful, not only with normals, but also with problem children and criminals. All this may well indicate some sociological implications for personality theories.¹¹

JUNG'S ANALYTICAL PSYCHOLOGY

Not only did Switzerland adopt psychoanalysis, giving it a very personal stamp, it also produced a new "depth psychology," the work of C. G. Jung. Based on psychoanalysis and having

some similarities to certain Hindu and oriental thinkers, Jung's system forms a cohesive unity. He is far more than a mere "deviant," but the great number of his publications, containing endless repetitions and not a few contradictions, make it difficult to acquire a precise idea of his teachings.

Jung was born in 1875 into a family of Protestant ministers and scholars. He spent his childhood and youth in Basel, where he also studied medicine. In fact, he belongs to the spiritual family of that strongly imaginative group of Basel scholars previously mentioned. Jung showed a precocious interest in psychological problems, and as soon as he had obtained his medical license, he entered the Burghölzli as a resident. During his nine years (1900-1909) in that famous institution, he became Bleuler's first associate, elaborated the Word Association Test into a means of detecting unconscious complexes,¹⁹ and together with Bleuler applied Freud's psychoanalysis to the study of psychoses.¹⁷ He left the Burghölzli in 1909 to devote himself to the private practice of psychotherapy.

From 1909 to 1913, Jung played a prominent part in the psychoanalytic movement, becoming Freud's first collaborator. Several of his contributions were accepted by Freud and incorporated into the psychoanalytic system. After Jung rejected Freud's sexual theory of libido, however, they came into conflict and Jung left the movement. For several years thereafter, his main interest centered on the study of psychologic types, with the well known distinction of "introvert" and "extravert." He supplemented Freud's concept of an individual unconscious and acquired complexes with his theory of a collective unconscious with inborn archetypes common to mankind. His book, *Psychological Types*, published in 1921, contains the principles of his typology and several other ideas which he expounded at length during the following thirty years in a long succession of books and articles.^{19, 20}

Jung's most important innovation, however, probably deals with the periods of human life. The popular concept of mental growth, peak, and decline had been modified by Freud only in

regard to childhood; Freud assumed an initial period of five years marked by an early rise of sexuality, followed by a period of sexual latency until puberty, with no further structural change after the instinctual emergence during that time. According to Jung, the picture is quite different; life is a succession of psychological metamorphoses, one of them being the "turning of life" at the age of thirty-five to thirty-eight, with the two halves of life complementary to each other. Neuroses may be produced as the result of an impediment in the normal development of "individuation," the psychological process by which an individual attains the unity of his total personality (conscious and unconscious). Through this final integration the "self," rather than the conscious ego, becomes the center of personality. The fully integrated individual has thus attained that which for centuries was called "wisdom," and in modern language "maturity"; he is now a socially more valuable person. Jung's psychotherapy, originally identical with Freud's psychoanalytic method, adopted as its principal aim a way of helping the patient to attain his individuation.

C. G. Jung is a fascinating man who leaves an unforgettable impression on many of his visitors. A skillful and experienced psychotherapist, he is also a great scholar, much of whose knowledge has been acquired by personal anthropological study. (He has sojourned among the natives of Uganda and the Pueblos of New Mexico, and has twice visited India.) His ideas have provoked great interest among theologians and anthropologists, perhaps more so than among psychiatrists. His opponents assert that his system is nothing but the resurrection of old gnostic speculations under a modern psychological cloak; his proponents claim that he has annexed to psychology a new field hitherto intermediate between psychology and religion. It is difficult to study his work objectively without feeling the strange seduction of his ideas, and one would wish that they were true! Unfortunately, his work contains more assertions than demonstrations, and it is regrettable that he did not publish at least a few complete case histories of patients treated by his methods.

PHENOMENOLOGY AND
EXISTENTIAL ANALYSIS

After World War I a need to find new paths arose in Swiss psychological and psychiatric circles. The refined clinical investigations of schizophrenia inaugurated by Bleuler had convinced several psychiatrists that the usual conceptual framework utilized for the description of mental conditions did not provide a real understanding of the states of consciousness experienced by patients. Textbook descriptions of delusions and hallucinations were considered purely verbal formulations, and ordinary concepts proved particularly inept for the expression of the more subtle emotional disturbances and feelings of depersonalization preceding the onset of schizophrenia.

A new conceptual frame of reference, inspired by Husserl's phenomenology, began to appeal to several Swiss psychiatrists as a more meaningful approach to the analysis of a patient's subjective experiences. Psychiatric phenomenology, initiated by the contributions of Ludwig Binswanger and Eugene Minkowski, should not be confused with the philosophical system of the same name. It is essentially a method that attempts to study states of consciousness by means of such coordinates as time, space, continuity, causality, etc., with the aim of achieving a deeper understanding of the patient's inner universe.²

In 1931, in a series of studies on mania, Binswanger extended his conceptual framework toward existential analysis. Shortly before, the German philosopher Heidegger, a former pupil of Husserl, had published a new existentialist system, elaborating a phenomenology of human existence as a whole. Binswanger adopted Heidegger's concept of "being-in-the-world" and used it, in modified form, as the basis for his revised phenomenological frame of reference. In 1942 he expounded his new system in a difficult book, followed by the publication of a series of research studies with schizophrenic patients.³ In the wake of World War II interest continued to grow; Kuhn published several excellent

clinical contributions, and Boss and Blum attempted a synthesis of psychoanalysis and existential analysis.⁹

Independent of Binswanger, but almost concurrently, Storch and Kunz also applied existentialist concepts to psychiatric problems. A psychiatrist in the best Basel tradition of independent scholarship, Kunz pursued his work in the direction of "anthropology," the philosophical study of human nature. His remarkable book, published in 1946, expounds a general theory of human nature and a fresh interpretation of the meaning of imagination. He hypothesized that the fundamental characteristic of man is awareness and anticipation of his own death; many psychological problems are discussed in the light of this theory.²⁵

Phenomenology and existential analysis are difficult methods, requiring considerable effort. Nevertheless, increasing interest indicates that they meet a demand. Classical psychological concepts, elaborated by the philosophers of the eighteenth century, are felt to be insufficient and there is a pressing need for finer methods of psychopathological analysis.

PSYCHOLOGY OF EXPRESSION AND PROJECTION

was the originator of the great interest in the psychological interpretation of physiognomy, mimicry, gestures, and movements. Historically, graphology is also a branch of the psychology of expression, i.e., the interpretation of one particular kind of human movement, handwriting.

The early French graphologists (Michon, Crépiaux-Jamin) tried to collect a variety of isolated graphic signs, endowing each with a specific psychological meaning. In this way, they produced a kind of graphological dictionary, with which they translated handwriting analyses into a system of rudimentary conventional types. This graphological school was subsequently superseded by the work of Ludwig Klages, the true father of modern graphology.²¹ Klages was also one of the founders of characterology, the science of the description, analysis, and classification of the various types of personality.²⁴ His elaborate characterological system provided a perfected frame of reference with which to report the findings of graphological analyses. In sharp contrast to the earlier "atomistic" approach, Klages based his analyses on the evaluation of what he called *Formmivertu*, i.e., an existential quality of handwriting bound to the level of the subject's vitality. This meant that the specific meaning of a particular graphic sign could vary considerably. Graphological analyses made in this fashion were of far higher standard than those prepared according to previous systems.^{22, 23}

Although a German citizen, Klages lived in Switzerland for almost his entire life. There his graphological method had tremendous success and attracted countless students. However, his system was later rivalled by that of the Swiss psychologist Max Pulver, whose more intuitive approach integrated into graphology new concepts derived from psychoanalysis and phenomenology (particularly the phenomenology of space). Pulver's major contributions were his textbook of basic graphology and his studies on the graphological diagnosis of intelligence and the handwriting of criminals.²⁵⁻⁴⁰

In Switzerland, graphology is considered a highly scientific and reliable method. Thousands of graphological analyses are

constantly required by industrial and commercial firms, as well as by public administrators. These are performed either in the Institutes of Applied Psychology or by private graphologists, some of whom specialize in the study of educational or marital problems. The claim is often made that modern graphology is apt to furnish more extensive personality analyses than mere dynamic psychology, and it is always a surprise for Swiss psychologists to learn that their American colleagues consider graphology unscientific. The reason for this discrepancy may be that *Ausdruckpsychologie* and characterology are basic disciplines in Switzerland, whereas Americans seem largely unaware of these approaches. ("Personology" is something quite different from characterology.) Attempts to use criteria of experimental test psychology to evaluate graphology seem, from the Swiss point of view, questionable procedures.

Although in Switzerland graphology is a basic psychological method, projective techniques are also used frequently. The first such test was developed in Zurich in the years 1904-1906. At that time psychiatrists were trying to supplement the methods of clinical examination with the new procedures of experimental psychology. Bleuler, who believed that the fundamental problem in schizophrenia was a waning of the strength of associations, tried to check his hypothesis with the Word Association Test, an old experimental method devised by Galton and widely used by Wundt and his pupils. In 1904 intensive research was initiated at the Burghölzli, under Jung's direction. However, Jung used the test as a detector of unconscious representations, exploring the dynamisms of psychosis. Historically, this was the first use of an experimental psychological method in "depth psychology," but to Jung it was more than that. He elaborated a classification of associations, dividing them roughly into verbal and semantic responses, characteristic, respectively, of extraverts and of introverts, thus revealing a structural aspect of personality. It is regrettable that the word "projective" was later used to designate both the "depth psychological" and the "character structural" aspects of the test, a semantic confusion that may be partially

responsible for the many sterile discussions about "projective methods."

It fell to another Swiss psychologist to create a new projective technique marking enormous progress over its predecessor. Hermann Rorschach (1884-1922), a man endowed with artistic gifts, a rich cultural background, great versatility of interests, and a profound capacity for synthesis, died prematurely at the age of thirty-seven, shortly after the publication of his fundamental work, the *Psychodiagnostik*.^{10, 41} This book gives a sketchy outline of his psychological theories, a synthesis of Bleuler's associationism, Freud's psychoanalysis, Mourly Vold's research on kinesthetic representations, Jung's typology, and an added touch of phenomenology. The test itself, inspired by "klecksography" (a children's game with inkblots, common in Switzerland at that time), contained several elements of Jung's Word Association Method. In the beginning Rorschach used both techniques, comparing the responses to the words and to the inkblots, and similarly measuring the reaction time. As in Jung's test, the inkblots had both a "depth psychological" aspect, i.e., the detection of complexes, and a character structural one; kinesthetic responses were considered characteristic of introversion and color responses of extraversion. However, Rorschach went further than Jung. He developed a new typology, adding to the introversion-extraversion concept the aspects of "dilation" and "coartation," which together form the *Erlebnistypus*. In Rorschach's method, the *Erlebnistypus* played the same role as the *Formniveau* did in Klages' graphological system; it was the key to which all other data had to be referred in order to ascertain their exact value. It is perhaps significant that the *Erlebnistypus*, which was for Rorschach and Swiss tradition the central element of his test, plays a rather negligible role in the American method of interpretation.

The success of the Rorschach test gave the decisive impetus to the elaboration of a whole set of projective techniques, in Switzerland as well as in the United States and elsewhere.⁴⁷ It would be tempting to study how the rationales of such tests ex-

press the different ways of viewing human personality in each country. Murray's Thematic Apperception Test or the Frustration Test of Rosenzweig, both centered on the investigation of the individual's dynamisms, conflicts, and defenses, are typical for America. Pfister's Color Pyramid Test and Lüscher's Color Choice Test, both orientated toward analysis of a subject's basic character structure, are typical for Switzerland. Such methods are often inseparably connected with their own original system of typology, as has already been noted in the case of Jung and Rorschach. This is particularly true for Szondi, and it is not surprising that after leaving Hungary, he found an adopted home in Zurich, where his test has been most thoroughly studied and applied.⁹

Consideration of the psychology of expression and projection affords another comment on differences in American and Swiss practices. In Switzerland projective techniques are used primarily for purposes of "depth psychology" and as tests of character structure. The skill of the interpreter is highly valued and there have been few efforts to utilize mathematical-statistical computations as a means of casting light on a subject's "dynamisms." The profession of clinical psychology, in the American sense, is unfortunately unknown in Switzerland. although in in-duc- tion would be well advised.

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VOCATIONAL PSYCHOLOGY

Another important development in the interim between World Wars I and II was the growing interest in aptitude testing and vocational counseling.¹ In 1918 Claparède opened in Geneva the first Swiss laboratory specifically designed to serve that need. Since, however, in several universities the chair of psychology was occupied by professors more interested in philosophy than applied psychology, the service demands of interested industrialists were largely unmet, until a group of engineers, led by Carrard, sponsored the establishment of the Psychotechnic In-

stitute in Zurich in 1923. Under the direction of Bjaesch it developed swiftly, and similar autonomous institutes were soon founded in Basel, Bern, Lucerne, and Geneva.⁵⁹

Although the psychotechnic institutes had been established by engineers, it was astonishing how successfully they combined a cautious empiricism in daily practical work with growing alertness to new trends. The Zurich Institute soon changed its name to *Institut für angewandte Psychologie* (Institute for Applied Psychology) and extended its research beyond the testing of specific aptitudes to studies of an examinee's total character. The ensuing publications, such as those of Ungrieth⁶⁰ and Moser,⁶¹ are of high caliber, broad in psychological knowledge and original in thought.

The extensive development of vocational counseling in Switzerland is partly due, perhaps, to the national psychology or social structure. Whatever the deeper explanation, it seems that the right occupational choice is more vital in Switzerland than in many other countries. Many Swiss towns have public agencies where psychologists provide low cost or free vocational counseling for young men and women. The time may come soon when every adolescent will receive an extensive examination.

The rise of applied psychology in Switzerland has produced a new kind of professional man, the "practical psychologist," whose education allies classical psychology, depth psychology, and characterology with intensive training in graphology and a thorough knowledge of the requirements of various trades and occupations. Since one of his main activities is vocational counseling, he has become even more well known by people in everyday life than the psychoanalyst is in the United States. These social aspects of "practical psychology" are obviously connected with the Swiss approach to problems of personality. If "anybody can do anything,"⁶² to quote the title of a recent American novel, then vocational counseling becomes superfluous. If, however, aptitudes are bound to a permanent individual character structure, then such counseling based on characterology becomes a vital necessity both for the individual and society.

SUMMARY

Until the end of the nineteenth century there was no Swiss psychology. Its rapid and extensive development since that time bears the characteristics of a cultural mutation. Not only has knowledge increased, but this knowledge has pervaded society and all aspects of life. It has been the purpose of this chapter to sketch briefly the origins and current trends in Swiss psychology. Cultural backgrounds, the growth of psychiatry, beginnings of psychoanalysis, Jung's position, phenomenology and existential analysis, the psychology of expression and projection, and the ramifications of applied psychology throughout Swiss life and customs were considered. Where pertinent, similarities and differences between American and Swiss approaches to the manifold study of personality were noted. The deep penetration of psychology and man's increased awareness of himself suggest that we may be at the beginning of a cultural revolution of incalculable importance.

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IV

**Personality Theory
in Britain**

IN REVIEWING TRENDS in countries other than the U.S.A., there is a tendency for certain writers to refer to that mysterious entity in psychology, the European trend, and to include Great Britain in their accounts by implication.¹¹¹ It is, of course, extremely doubtful whether any one European trend exists, although it is probably true that there are fairly definite specific trends in certain individual European countries, such as France and Germany. When we consider Great Britain, the existence of a national trend becomes very doubtful indeed. The only reasonable conclusion from a survey of the British literature on studies in personality and on personality theory would be to the contrary. As in the United States, there are many trends, ranging from the intuitive to the rigorously scientific, from the biological to the environmental, from the idiographic to the nomothetic, from the psychoanalytic to the factor analytic, etc., with every conceivable intermediate shade of opinion clamoring for expression. Whether this multiplicity of systems and methodologies is desirable is another matter, and will be referred to again in the concluding part of this chapter.

Because personality is one of the vaguest terms in contemporary psychology, many arbitrary decisions must be made as to what should not be included under this heading. For example, it is difficult to know how to separate current trends in person-

ality theory from the very wide and continuously developing area of the whole emotional development of the individual. Again, it is difficult to distinguish between a definite contribution toward a theory and a mere study, however good, which happens to lie within the broad aegis of personality. Even if the terms of reference of this chapter were clearly delineated, it would still entail considerable arbitrary and personal selection to treat this topic in a few thousand words. Nevertheless, it is hoped that despite these limitations, the reader will obtain a reasonably accurate picture of the contemporary state of affairs in Britain. In the main section of this chapter I propose to expound on the views and findings of the leading psychologists in the field, beginning with the more speculative schools of thought and ending with those of a more scientific and objective nature. In the concluding section, I shall attempt to comment briefly on the major tendencies, and give an over-all evaluation of the field. All that remains is to remind the reader that all evaluation worthy of the name is probably biased in favor of the personal predilections of the author.

STUDIES IN PSYCHOANALYSIS AND RELATED AREAS

I shall begin this survey with a brief description of the psychoanalytic schools in Great Britain today.* The British Psycho-Analytic Society, which is now large and well established, would seem to be split into three unofficial groups: the Kleinian (by far the largest), the orthodox group led by Anna Freud, and a mixed group. Melanie Klein has had considerable experience with the application of psychoanalytic techniques to young children. She began by recognizing that the adult personality is the ultimate product of a succession of complex and interrelated developmental stages, each stage depending on what has gone before for its successful outcome. Freud "discovered" the oedipal con-

* As early as 1930, Flugel published a well-reasoned account of the psychoanalytic method.

lict, and stressed its importance in human development. Klein carried this a step further, and is primarily concerned with the stages which supposedly precede the oedipal conflict and in determining its nature and intensity. She and her followers believe that there is a primitive ego, that there are primitive object relations from the very commencement of life, and that the way the infant deals with its major object, the breast, will determine all the further steps in the shaping of his future. Among the many distinguished British psychoanalysts influenced by Klein we must single out the late Susan Isaacs who has made a distinct and valuable contribution to the study of the personality of young children.⁷⁰

cent books he argues most persuasively for the essential nature of the mother-child relationship.^{13, 14} His arguments merit serious attention, although it is probable that the supporting evidence is not as strong as he would have his readers believe. For example, both H. Lewis⁹⁹ and Andry,³ as a result of careful experimental investigations, independently come to the conclusion that Bowlby's major hypothesis regarding maternal deprivation is largely unsubstantiated. Andry produced strong evidence to suggest that the role of the father is at least as significant as that of the mother.

There are numerous workers who, while remaining within the field of psychoanalytical theory, have attempted to integrate this view with other and more quantitative schools of thought. Pickford,¹²⁷ for example, is attempting to relate the psychoanalytic approach to problems of personality and personality disorders to the personality theories of Kretschmer,⁹⁶ and to the dimensional system of Eysenck.^{20, 25, 27} Grygier has developed a new concept of crime and neurosis within the context of a specific personality dimension of aggression.⁵⁷ He, too, is in the process of developing a new model of personality,⁵⁸ which corresponds fairly closely to the postulates of psychoanalysis; it is, however, claimed to be more in line with factorial studies, and is based on statistical analysis as much as on any one personality theory. An example of how psychoanalytic personality theory can be formulated objectively and tested experimentally may be found in the work of Goldman-Eisler on breast feeding and character formation,^{51, 52} which is now being extended and modified by members of the psychology department of Queens University, Belfast. Her otherwise exemplary studies are marred only by her failure to consider alternative hypotheses as possible explanations of her findings. More recently her work has been in the field of speech behavior and the objective measurement of changes in emotional states during psychiatric interviews.⁵³⁻⁵⁵ According to Goldman-Eisler, these objective measures are able to discriminate with ease among the well established types in the field of personality.

An active psychiatric research unit directed by Anthony at

the University of London Institute of Psychiatry, is also proceeding along experimental lines within the broad framework of psychoanalytic concepts.⁴ The work of this unit merits serious attention and the majority of its many projects are of considerable importance and interest, although they tend at the moment to be lacking in several of those details of design and execution which characterize the well-planned experiment in psychology. Anthony is primarily concerned with the psychopathological aspects of personality in children, and the unifying theme throughout all his projects seems to be that the child's perceptual activities are causally related to his personality and general behavior trends. For example, in an exploration into the etiology of childhood nightmares, he has been successful in relating the child's manner of visual perception during the day to his disturbances at night, to his EEG, and to other aspects of his personality. He is also engaged in an experimental investigation of childhood encopresis in an attempt to confirm predictions based on psychoanalytic theory. In the same department, Bene is developing an expanded version of the Blacky test, with a picture for each of the Freudian developmental phases, for diagnostic use with children.¹²

There has been an interest in group psychology, both within and outside psychoanalytic circles. At the Tavistock Clinic Bion^{9 11} and Ezriel¹³ have been investigating group relations, studied as phenomena of personality interaction within the field of orthodox psychoanalytic procedure. Taylor, at the Institute of Psychiatry, has provided another example of the quantitative analysis of group structure and personality interaction.^{14 15} He has applied a three dimensional frame of reference to the evaluation of emotional manifestations and has devised methods of measurement. These three dimensions are conceptually independent of each other, and refer, respectively, to public relationships, dyadic relationships (indicating phenomena derived from the interactions of group members), and autistic or private and personal intra-relationships. The interactions of these three variables mold both the group structure and the individual personality.

At Birkbeck College (University of London), the sociometric method of Tagiuri¹⁵⁶ has been adapted by Foss to give a "profile" of the individual's role in the group, the adaptation consisting essentially of obtaining information obliquely instead of directly.³⁹ The new method has two major advantages over existing sociometric techniques: The oblique questions appear to yield data which represent validly existing valencies in the group rather than those which members would like to exist. The method also offers more data regarding each member's role, with a corresponding increase in reliability. It seems likely that this technique will provide a useful means of assessing how an individual affects other people.

As in other countries, new projective techniques are being developed and existing ones investigated. At Durham University, Smith and Madan developed a three dimensional projective technique similar to the Rorschach, but involving both kinaesthetic and tactile modalities.¹⁴⁹ The original version of this test had serious methodological limitations which have since been overcome, and a new and well designed study is in progress. It has already been demonstrated that the test discriminates between various normal and abnormal groups where the Rorschach fails.¹⁰⁴ A clinically useful but unstandardized technique has been developed by Lydia Jackson,^{80, 81} who has produced a TAT type test for children.⁸² It consists of six pictures, each aimed at eliciting the child's attitude to typical family situations—such as rejection or sibling rivalry. Bene and Anthony, at the University of London Institute of Psychiatry, are developing a different type of family attitude test, which they claim readily provides quantitative data for both research and clinical purposes. At the Tavistock Clinic, Phillipson has developed a new projective test, the Object Relations Technique, in which a perceptual frame of reference is integrated with interpersonal qualities current in psychoanalytic theory.^{125, 126} At Edinburgh, Semeonoff is examining relationships between certain personality variables, as revealed by projective and other techniques, and academic success.¹²⁷ Other psychologists in the same department are engaged

in validation studies dealing with the Szondi, Mosaic, and Rorschach tests.

The Rorschach test has been the subject of much critical investigation. Numerous psychologists have applied statistical methods, especially factor analysis, to the various Rorschach scores and indices.^{107, 128, 140} In general, their findings have failed to validate the most cherished beliefs of those who use the test indiscriminately. For example, Keehn demonstrated that most of the assumptions about color responses are unjustified.⁸⁸⁻⁸⁹ Very recently, Metcalfe¹⁰⁸ and Payne¹²⁹ of the University of London Institute of Psychiatry, after a series of critical surveys of the relevant literature, concluded that a large majority of existing Rorschach studies are so poorly designed, controlled, and analyzed that they are of little consequence. Most of them fail to stand up to cross-validation. Indeed, the more recent and well controlled studies have produced almost entirely negative results. Consequently, the Rorschach must at present be viewed with suspicion whether as a clinical or as a research instrument. It is hardly necessary to add that these conclusions are strongly disputed by some members of the British Rorschach Forum, such as Alecock¹ and Barker.⁸ However, their arguments are less convincing and there would seem to be few crucial experiments which support their point of view.

Margaret Lowenfeld, a well known worker in the areas of personality and projective techniques, and her colleagues at the Institute of Child Psychology have for many years been interested in the possibility of creating modes of expression, rarely tapped by other projective material, to be used an indefinite number of times by the same individual and the results of which can be read directly without translation into language.^{100, 101} Lowenfeld maintains that each of these methods lies intermediately between test and technique. A remarkable claim for her Mosaic Test¹⁰⁰ is that it produces characteristically different types of responses in Britain and in the United States, and elicits cultural differences in the study of primitive peoples. A frequent criticism of the technique is that no attempt has been made by

Lowenfeld to provide an objective method of analyzing the responses. Her reply to this is that in the present state of knowledge and of practical psychiatry the categories into which patients can be placed are insufficiently accurate to serve as reliable comparative data. She holds that one of the central characteristics of modern psychiatry is the "essentially indeterminate nature of psychiatric descriptions and the interpretation of categories." Hence Lowenfeld considers that statistical and scientific methods can only be applied usefully to her data when the problem is very sharply defined. It would seem that Lowenfeld and her group are primarily interested in the study of individual personality structure and development, and that so far they have failed to produce adequate normative data for any of their techniques. Although she and her associates are usually able to produce skillful and insightful accounts of personality structure and dynamics, other British workers report much less success in the interpretation of data obtained.^{70, 90} Numerous attempts are now being made in various British institutions, particularly the University of Bristol, to remedy this unfortunate lack of norms. Lowenfeld is also in the process of analyzing records collected over the last two decades in psychotherapy with both children and adults.

At the Psychological Research Unit attached to the Crichton Royal Hospital, Dumfries, Raven has developed, by means of comparative matching, a method which "enables the investigator to divide people according to any convenient criterion, and to compare the classes so formed in order to determine what, if any, characteristic features distinguish one class from another."^{129, 130} The method is suitable for children from six years of age and for adults, and it is claimed to show the degree to which people conform to preconceived types of personality. It also enables one to determine the personality traits typical of any given class of people, regardless of any *a priori* theories. Discussed in full in *Controlled Projection for Children*,¹³¹ it has been used by Raven and his associates in a variety of different experimental situations: with children,⁴² with delinquents,^{2, 41} and for comparison of differences in culture patterns among German and English school

children and students.^{84, 85} Similarly, Frankl and Mayer-Gross¹³ and Hetherington and White⁸⁶ investigated the changes in personality traits following leucotomy, both as recorded by the patient himself and as noticed by his family. Foulds developed a related technique for an analysis of TAT responses of anxious and hysteric patients.⁴⁴

Also at the Crichton Royal Hospital, a new kind of psychological interview has been developed in which the patient is encouraged to elaborate his responses to the topics raised during the interview. In addition to its use in the clinical assessment of personality, this projective interview provides a frame of reference within which the individual responses can be systematically elicited and recorded without loss of qualitative information. This technique has been used by McAdam and Orme to compare alcoholic patients with normal and abnormal EEG's.¹⁰²

One of the problems posed by the so-called psychosomatic disorders is that of the relationship between somatic disorder and personality. In the past, numerous attempts have been made to identify certain personality configurations with specific psychosomatic abnormalities. In America, largely under the influence of psychoanalytic theory, this has reached alarming proportions, but so far few valid findings have emerged.⁹⁷ In 1955, the European Psycho-Somatic Association was founded in London, together with a new publication, *The Journal of Psychosomatic Investigation*. In the same year a twenty-one chapter volume was produced, in which a variety of contributors discussed a wide range of psychosomatic disorders and frequently attempted to relate them to specific personality patterns.¹¹⁴ This interest in the many aspects of psychosomatic medicine is reflected in the type of research undertaken by psychologists in various parts of Britain. In Scotland, members of the University of Aberdeen have been investigating the personality characteristics of patients suffering from dysmenorrhea and from hypertension. In Wales, at the Neuropsychiatric Research Centre in Cardiff, Ingham has recently made a critical study of those personality traits which are supposed to be associated with the neurodermatoses. In Eng-

land, Poser has successfully related specific personality traits to certain gastro-intestinal disorders.¹²⁸ A closely related topic is the relationship between physical constitution and psychiatric disorders. Spencer compared the physical constitutions, derived from somatotype studies, of psychologically sick and well Oxford students, and related these data to their personalities, as assessed by both clinical interviews and personality tests.^{19, 150} Parnell has reported similar work.¹¹⁵

One of the ways in which the war years have left their impact on British psychology has been the increased interest in child development.* For example, Burlingham and Anna Freud have been interested in some of the special problems of children reared in institutions.^{17, 18} At the Institute for the Study and Treatment of Delinquency (I.S.T.D.) several excellent investigations are in progress. (The Institute publishes its own journal, *The British Journal of Delinquency*.) At the University of Bristol Institute of Education, Stott is primarily concerned with the personality of the maladjusted delinquent child.^{152, 153} He has recently developed a Social Adjustment Guide for use with children aged five to fifteen years, and has integrated his experience into a new typology theory of maladjustment.¹⁵⁴ At the University of London Child Study Centre, Hindley and his associates are executing invaluable longitudinal follow-up studies of 200 children from birth to maturity.^{34, 75, 100} At the empirical level, they have assembled a vast amount of factual information about the vicissitudes affecting the children in their sample, such as their homes, social class, life experiences, etc. At the theoretical level, their data should throw considerable light on the effects of infant experiences, including upbringing and training procedures, on later personality development. In particular, their project is designed to permit investigation of some of the more specific hypotheses derived from the writings of psychoanalysts. Another question of theoretical importance concerns the predicta-

* This interest is not only a postwar phenomenon. To Britain goes the honor of appointing the world's first official child psychologist, Sir Cyril Burt, to the London County Council in 1913.

bility of later personality from a knowledge of earlier aspects

An approach which has interested several workers has been the role of intellectual factors in the development of personality. E. Lewis has attempted to relate intellectual development to personality within the context of Jungian analytic psychology.⁹⁸ Griffiths also stresses the effects of intelligence and early experience of success and failure on the developing personality.⁹⁹ As a result of intensive research with young children, she has developed a new technique which allows the child to give expression to thoughts and fantasies not usually expressed. On the basis of the material thus obtained she has proposed new hypotheses concerning the function of fantasy as a link between the intellectual and the emotional in the developing personality.

DIMENSIONAL AND ALLIED APPROACHES

The University of London Institute of Education is a major source of high quality personality research with children. The publications of their leading psychologists, Vernon and Fleming, are probably too well known to require much elaboration here. Vernon in particular has published three excellent texts in which much of the British literature dealing with personality tests, assessment, and techniques is critically and succinctly reviewed.¹⁰²⁻¹⁰⁴ The output of this Institute, especially in the way of research theses is prodigious and it is remarkable how much its many and varied activities resemble those of the better institutes of child guidance in the United States. It is very unfortunate that with few exceptions, such as the work of MacArthur¹⁰⁵ on persistence and of Rogers¹³⁷ on verbal fluency, the important findings of most of these theses remain unpublished. Both Vernon and Fleming may be accurately described as advocating scientific methodology and statistical techniques, using an experimental approach and not accepting any psychodynamic theories unless satisfactorily confirmed by well designed experimental validation. Vernon, like Eysenck, believes that personality can be resolved

into orthogonal and operationally defined dimensions along which all individuals may be measured. Unlike Eysenck, however, he also recognizes the necessity for approaches of a more idiographic nature, at least in the early stages of an investigation. Fleming may aptly be termed a field theorist. Unlike Eysenck and Vernon, she places almost all her emphasis on environmental factors and the influence of the group on the individual in the molding of personality.^{36, 37}

At the London School of Economics, Himmelweit and her associates are carrying out a large scale series of studies on the operation of social class variables during adolescence.^{60, 69, 71} They are interested in numerous areas of personality, such as the control of sex and aggression, and the influence of current practices in child rearing. Himmelweit has had considerable experience in working with personality tests for children,⁷² and in the application of these tests to student selection.^{67, 68, 73, 74} At present, she and Oppenheim are engaged in a study, sponsored by the Nuffield Foundation, exploring the effects of television on children, particularly the more subtle influences on the child's personality, and the development of attitudes, stereotypes, and patterns of tastes and interests.

At University College in London, Russell and his associates are engaged in many excellent and well controlled studies. Russell is particularly interested in personality behavior under stress,^{133, 134} and he has recently been concerned with a series of experiments in which individual differences encountered under various conditions are experimentally investigated.^{130, 151}

The largest psychology department in Britain and the most active, if articles published and papers read can be used as an index, is that of the University of London Institute of Psychiatry.²² This department is one of the few in Britain, or the United States, to adopt a policy of program research on a large scale.¹⁰⁵ Program research has the advantage of being economical in manpower, and is more likely to produce fruitful results (witness the success of the Pavlov and Gestalt schools). Such a policy of circumscribing the field of research, coordinating dif-

ferent methods of investigation, and attempting to achieve a unified point of view, still leaves the choice of problem, and even of techniques, to the individual members of the department. By an ingenious adaptation of factor analysis, termed *criterion analysis*,²¹ Eysenck and his associates have developed an objective dimensional framework in which personality can be described in terms of several mutually orthogonal dimensions, in particular, introversion-extraversion and neuroticism.^{20 23, 27} The relationship between these two dimensions and current nosological psychiatric categories has been clearly established. The introverted neurotics (designated the "dysthymic" group) consist of patients with anxiety states, reactive depressives, and obsessive compulsives, extraverted neurotics (designated the "hysterical" group) consist of psychopaths and hysterics. Two other mutually orthogonal dimensions of personality which have been established are intelligence³⁰ and psychoticism.^{22 24 28} Together with introversion-extraversion and neuroticism, these dimensions are regarded as accounting for much of the total variance of "personality." As opposed to Cattell, who favors the extraction of many further factors, Eysenck merely regards this aspect as a necessary first stage in the scientific study of personality.³⁰ This descriptive or static stage, in which the study of personality is confined to classification, must eventually be supplemented by a dynamic or causal kind of investigation. This explanatory stage is the concern of the department at the moment.²⁵

So far the dimension of introversion-extraversion has received the most attention, the explanatory theory being based on the concepts of inhibition and excitation as originated by Pavlov,^{21a 21b} and modified by Hull.^{16 18} In a soundproof conditioning laboratory especially constructed for the purpose,⁴⁸ Franks has shown that conditionability is related to introversion-extraversion, and not to neuroticism.⁴⁸ He has also shown that drugs, such as sodium amytal, tend to increase extraversion and to reduce conditionability.⁴⁹ These and other experimental findings have been integrated by Eysenck into a new theory of personality which accounts for the dimension of introversion-extraversion in

terms of Pavlov's concepts of excitation-inhibition.²⁸ Many of the typical behavior traits of the common neuroses, such as anxiety and hysteria, may perhaps now be accounted for in terms of excitation-inhibition and a facility or difficulty in forming and retaining conditioned responses. It is also possible to discuss behavior abnormalities such as recidivism in terms of conditioning.⁴⁷ Many predictions based on excitation-inhibition have been, or are being, tested. It has been shown that extraverts show a greater figural aftereffect than introverts.³¹ Similar results are being obtained with visual fixation tests, the serial position effect in rote nonsense syllable learning, and various reminiscence studies. Whereas most textbooks of psychology have separate sections on these phenomena and on such other topics as learning theory, social psychology, behavior, clinical psychology, personality, abnormal psychology, etc., Eysenck and his associates are attempting to integrate these diverse topics in terms of a dimensional analysis of personality and the laws of cortical functioning based on the process of excitation and inhibition. Less attention has so far been given to elucidating the causal factors underlying the dimension of neuroticism, which is regarded by Eysenck as a form of drive related to the over-excitability of the autonomic nervous system, particularly the sympathetic branch.²⁷ That neuroticism is hereditarily determined and therefore constitutional is strongly suggested by a study of twins by Eysenck and Prell.³²

Comparatively little has been contributed so far toward the establishment of an explanatory basis for the dimension of psychoticism. Payne¹²⁰ and Brengelmann,¹⁵ for different reasons, have both refuted Kretschmer's "dissociation" hypothesis, which postulated a dimension of personality along which manic depressives, cyclothymes, normals, schizothymes, and schizophrenics can be ordered.^{95, 96} Some positive evidence has been obtained^{97, 110, 113} to suggest that the mental slowness of psychotics is in accordance with Babcock's theory.⁵

In 1948, the Medical Research Council established the Unit for Research in Occupational Adaptation under the honorary

direction of Anbrey Lewis at the Institute of Psychiatry. One section of this Unit spent five years studying the relationship between psychological disturbances and occupational handicaps among male and female unskilled workers. These inquiries provided Heron with an opportunity to extend the work of Eysenck and his colleagues beyond the confines of hospital, university, and Armed Forces samples.⁶¹⁻⁶³ His conclusions provided considerable support for the dimensional analysis of Eysenck, but so far too little is known about the factor composition of many of these tests to permit their general application for routine use. As a result of this work, Heron developed a brief personality inventory for use with industrial and other worksets;⁶³ and Venables showed that clinically extraverted subjects have a tendency towards increased inertia on tests of motor performance, whereas introverted subjects have a tendency toward increased motor activity.¹⁶¹ Another branch of this unit has been investigating the occupational problems of certified mental defectives. One of their main conclusions was that the employment of morons is more often interrupted because of personality difficulties than because of intellectual limitations.^{112, 160, 166}

For the past eight years, Petrie has been applying Eysenck's dimensional approach to elucidate the different effects on personality following excision in various cortical areas.^{121, 122} Investigation of patients after brain operations for the relief of intractable pain has thrown some light on the experience of pain in its relation to personality.¹²³ More recently the increasing use of drugs with a reversible effect on personality has invited comparison with changes following brain surgery.¹²⁴ Petrie and her colleagues in London have been assisted by close collaboration with other workers in France and the United States.

Other work related to Eysenck's research program includes Shapiro's efforts to apply the Pavlovian concept of inhibition to some of the effects of brain damage;¹⁴¹⁻⁴³ Jones' attempt to extend the findings of Franks to children by applying conditioned response techniques to the elimination of such psychiatric symptoms as enuresis, etc.;⁸³ and Eysenck's, Granger's and Franks'

studies of the relation between perceptual learning and personality factors by means of a battery of objective tests, including conditioning. Workers in other institutions have also provided support for this theoretical system. At Runwell Hospital, Foulds has found that after ECT introverted neurotics tend to resemble extraverted ones in their Porteus Maze test behavior.^{42, 43} At University College, Russell and Watson are attempting to relate differences in cholinesterase levels to the dimension of introversion-extraversion.¹³⁵ At Aberdeen the dimension of introversion-extraversion is being related to learning and perceptual phenomena with results very much in the predicted direction.

Broadhurst, at the Animal Psychology Laboratory of the Institute of Psychiatry, is attempting to extend the dimensional approach of Eysenck to the infra-human level. In particular, he is concerned with the dimension of neuroticism, and since rats have an autonomic nervous system, it should be possible to measure individual differences in emotional behavior. Attention has also been directed toward the concept of emotionality,¹⁶ defined operationally in terms of scores from Hall's open field test.⁵⁹ Broadhurst and Franks are extending Eysenck's explanatory theory of the dimensions of personality into the animal world by means of drugs. Similar work is in progress at University College, London, where Russell and Watson are using cholinesterase.^{135, 165}

The Nuffield Research Unit, also at the University of London Institute of Psychiatry, is concerned, among other things, with group personality tests. It is already clear (the final report is to appear after 1958) that measures of neuroticism, introversion-extraversion, and ability to work satisfactorily under conditions of stress can play a useful part in selection batteries. A particularly important aspect of this investigation has been the evolution of tests of problem speed solving,⁵⁰ which have proved of value in differential diagnoses between psychotic and neurotic disturbances.^{22, 110, 113, 140, 147}

CONCLUSIONS

Despite the lack of any single trend in Britain, two broad groupings emerge from the above brief survey. The distinction is by no means clear-cut and almost every intermediate position is represented. At one extreme are the clinical or speculative personality theorists. Those belonging to this group, to the exclusion of all other points of view, contend forcibly that personality is a unique whole which functions as a totality, and which can never be resolved into independent traits, or into orthogonal dimensions. At the other extreme are those few who eschew the idiographic approach entirely, and who proceed instead within the framework of a rigorously scientific conceptual system in which attempts are made to define and to measure those mutually independent components whose total sum they call personality. It is very likely that similar conclusions would have emerged had the writer surveyed the American scene.

As one would expect, the former trend is strongest among psychiatrists and their psychologist followers. It seems unfortunate that so many psychologists, both in Britain and in the United States, are content merely to emulate their psychiatric colleagues instead of developing a language system and a conceptual framework of their own. However, not all of them are entirely hostile to any attempts to place personality theory on a scientific footing. While some are merely indifferent, others are actively engaged in trying to confirm or refute by experimental procedures, and even by applications of the hypothetico-deductive method, tenets which had hitherto been accepted as dogma. Unfortunately, the quality range of these attempts is great, varying from extreme methodological naiveté to the highly skilled and sophisticated investigations of psychoanalytic hypotheses by psychologists such as Goldman-Eisler and Sandler.

Perhaps it would be appropriate to state briefly the more important criteria by which a truly scientific study can be recognized. These are:

1. Rigid observance of the basic principles of formal reasoning.
2. Rejection of all statements incapable of yielding precise predictions and therefore impossible to refute.
3. A recognition that conviction is inadequate without the support of controlled validation.
4. Careful consideration of all alternative hypotheses before rejecting them.
5. A willingness to use available experimental methods and statistical techniques which may be applicable.
6. Reliance only on data which are public, precisely described, and amenable to replication.

In Britain, as in the United States, there would seem to be three major obstacles to the genuine progress of personality study. Firstly, there is, in some quarters, a resistance to accepting the full implications of scientific method as outlined above. Secondly, as vigorously noted by Slater, there is an increasing tendency, marked in Britain but assuming formidable strength in the United States, to minimize the importance of genetic or constitutional factors in interpreting psychological data, and to attribute more and more to the environment.¹⁴⁸ This facile acceptance of environmentalistic explanations is, in part, a product of the failure to consider alternative hypotheses. In many instances hypotheses of a more biological nature would be at least as tenable, if not as fashionable, as environmental ones. If the science of personality theory is eventually to attain a methodological level comparable with that of the other natural and biological sciences, then it is essential that these alternative hypotheses be given full consideration. Thirdly, it is remarkable how much good research is wasted by never being followed up or related to other projects. This is especially true in personality theory where it is by no means uncommon to find one institute producing numerous unrelated studies, each well designed and of possible theoretical importance, but rendered far less effective by lack of integration into a planned research program. There is clearly an urgent need for many more institutions to coordinate their intra-departmental efforts into a unified program, if

effective research is to be undertaken and if a theory of personality is to be developed.

An area in which there seems to be a particular need for rigorous thinking is that of personality tests, and in particular, projective techniques. There is scarcely a personality test which could not profit from considerable further investigation. What is needed is a critical evaluation of existing tests, rather than an extension of their use or the introduction of new ones. The fact that in at least one large British department such a program has been initiated is a very good omen. There is every hope that by further research tests will be developed which will accurately and conveniently measure the main dimensions of personality.

It is, however, possible to conclude this chapter in a positive vein. There is a growing tendency to discard the intuitive approach and to supplant it with one based on rigorous scientific principles. So far this tendency is firmly entrenched in only a limited number of psychology departments, such as those directed by Eysenck, Himmelweit, Russell, and Vernon, and is confined to an even smaller number of leading psychiatrists such as Mayer-Gross, Slater, and Roth.¹⁰⁶ It is hoped that these trends will spread, and that it will soon be the rule rather than the exception that theories of personality in Britain will be based on established facts, scientific methodology, and a secure biological foundation.

SUMMARY

This survey of trends in personality theory in Britain covers schools of thought ranging from the more speculative to the rigorously objective. It is concluded that no single British trend exists, and that, in general, the situations in Britain and the United States are similar. In both countries there are three major obstacles to progress: resistance to scientific method, as defined by the author; an environmentalistic bias; and a lack of intra-departmental integration. Two additional tendencies are cri-

cized: the tendency for some psychologists to ape their psychiatric colleagues instead of developing a language system and conceptual framework of their own, and the eagerness with which new projective techniques are introduced while existing ones remain unsatisfactorily validated.

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Personality Theory in Modern Italian Psychology

IN COMPARISON with many other countries, psychology in Italy developed rather slowly, overshadowed always by the dominant position of certain philosophical trends in Italian universities. Neo-Hegelianism in particular opposed the development of psychology as an independent science. Eventually the following paradoxical situation arose: when positivism reigned, psychology was at first considered too metaphysical, and later on, when idealistic philosophies were espoused, positivistic psychology, as represented by Sante de Sanctis, for example, was criticized as too scientific and too opposed to metaphysics.

As a result of this situation, only two chairs of psychology existed in 1939, one each in Rome and Milan. Since World War II, however, much progress has been made, and this has been well described in a recent survey by Misiak and Staudt.⁷ After many years of opposition, suspicion, or indifference there appears now to be a more broadly based interest for psychology in Italy. It is the purpose of this chapter to consider briefly the major contributions to personality theory made by three Italian authors: Gemelli, Pende, and Massucco Costa.

GEMELLI

The Franciscan priest Agostino Gemelli, Rector of the Catholic University in Milan, is outstanding in the history of Italian

psychology.³ With other leaders in the field, he fought for the recognition of psychology as an independent science and defended its existence. Together with Ponzo, Banisconi, Marzi, and others, he established an autonomous position for Italian psychology.

Gemelli's personality theory, adopted by most Italian psychologists, has been largely determined by this need for independence. He attempts to disregard philosophical considerations and limits the psychological study of the "wholeness" of man to an exploration of the reciprocal influences of those forces which in their wholeness constitute personality. This involves an analysis of the constellation of functions which are determined by varied factors. According to Gemelli the uniqueness of personality is of interest to the psychologist only insofar as it represents a unique constellation of functions. Characterology is considered no more than the analysis of factors which underlie these functions.

Gemelli views personality in a dynamic sense; that is, every individual throughout his life must adjust effectively to a given environmental situation. Thus, characterology is not viewed as something static or unchangeable, but rather as part of a dynamic whole. For Gemelli characterology constitutes a method, a means of studying human expression. The psychologist must ascertain the outer manifestations of behavior and then, by means of intuition or induction, attempt to comprehend the process or processes responsible. Human behavior indicates something about man's goals, the value placed on achievement, and the manner of attainment. "It is not the function of characterology to estimate the structure of human character, but rather to demonstrate how a man acts."² In this way Gemelli is opposed to Klages and Haberman whom he criticizes for attempting to force characterology into a set, preconceived schema.

Gemelli's definition of personality is similar to Allport's* in

* "Personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment."

that he does not differentiate between character and personality, as is often done by German psychologists. According to Gemelli, personality may be viewed somewhat like a pyramid consisting of three levels: the first or lowest is established by organic functions (mirrored in the constitution), the middle level includes dispositional tendencies and drives, and the third, or highest form, consists of the "higher feelings and functions" encompassing thought and will. Gemelli is opposed to typologies, believing that human activity cannot be adequately expressed in such a constricted approach.

For many reasons, partially related to the circumstances of Italian life, psychoanalysis has had few adherents in Italy. The only psychoanalytic school, represented by Musatti in Milan, stands in friendly opposition to Gemelli who rejects Freud's pessimistic determinism and mechanism, and regards Adler's teachings as the positive consequence of Freud's views. Despite his reservations regarding psychoanalysis however, Gemelli gives Freud full credit for showing how an analysis of the past can lead to an understanding of character.⁵

As may be surmised, Gemelli provided Italian psychology with a personality theory which filled an urgent need for further research and study. His volume *Introduzione alla Psicologia*,⁶ written in collaboration with Zunini and other psychologists, represents, at this time, the only comprehensive survey in Italian of current problems in psychology. The many investigative efforts currently being undertaken at Catholic University hold promise of further advancing psychology in Italy.

PENDE

As a physician, Pende stands outside the immediate circle of Italian psychologists. He must be included however, because of his many contributions, particularly his biotypology, which has become well known far beyond the confines of Italy. In general, Pende has attempted to combine medical science with Christian

philosophy, for the purpose of giving the physician (who should be both educator and psychologist) a means of comprehending human behavior. He criticizes positivistic and materialistic medicine and philosophy, as well as neo-Hegelian idealism. The latter, as an "antipersonalistic" philosophy, has particularly weakened the freedom of the individual, his responsibility, and his sense of spiritual values. Pende holds that it is impossible for anyone to limit himself strictly to empiricism, without ever coming in contact with questions of philosophy or theology. He maintains that Christian philosophy offers the deepest insights and the most valuable roots.

It is within this framework that Pende places biotypology—an attempt to study man "in his biotypological, concrete aspects," as opposed to ontological-metaphysical aspects, which emphasize substance, individuality, and rationalism. Both approaches are closely related in the study of human personality and are complementary. Biotypology views man as a living individual, as a complex of vital processes, which differ from person to person for three reasons: heredity, environment, and free will.⁸

By "biotypological, concrete aspects" Pende means a detailed system of constitutional-morphological analysis of physical types. He defines "constitution" as an "individual morphological complex, the architectural style of the body, the habitus."⁸ In order not to limit himself to outer bodily characteristics, inner morphological studies, such as visceral proportions, are also included. This is accomplished with the methods of morphology, anthropometry, differential physiology, constitutional endocrinology, and differential psychology.

After describing in detail the morpho-physiological aspects of his system, Pende considers the far more difficult task of assessing psychological attributes. He recognizes that, unlike somatic elements, the genesis of psychic characteristics does not follow the biological laws of heredity. "Moral character" and intellect cannot be subordinated to morphological and hormonal hereditary factors. Although associated with bodily structures, they are never entwined or proportionally dependent on such factors, as

has been frequently postulated. "Will and intellect, reason and moral sentiment necessarily transcend biological laws." Nevertheless, Pende asserts, the structural and biochemical conditions of the body either favorably or adversely influence the processes of intellect or will, the noetic sphere, and the sentiments. He views character as a four-sided, biotypological pyramid, based on the individual totality of inherited dispositions, not necessarily manifest, which may be fulfilled under the influence of free will, environmental education, and with the help of God.

On this genetic basis Pende describes the four sides of the individual, which together constitute the phenotype. They are the morphological side (*habitus*); the functional or humoral-dynamic side; the moral side (character); and the intellectual side. These four aspects create the inseparable unity and wholeness of the person, forming a synthesis of all individual abilities.

Pende's theory has not found many adherents among Italian psychologists, in part because his attempt to solve several different problems simultaneously seemed too utopian. Indeed, fundamentally different questions only appeared to be solved; many will require further clarification and more exact methodological exploration.

MASSUCCO COSTA

Another Italian psychologist whose work should be mentioned is Massucco Costa. As a student of Kiesow and Gatti, she did considerable work in experimental psychology and Gestalt theory. At present, as director of the Psychological Institute of Turin University, her major interest is in social psychology, and her views on characterology are important in terms of their contribution to social psychological theory and methodology.

In general, Massucco Costa's approach is eclectic. She is not an adherent of any specifically defined characterology and does not favor theories, attempting to comprehend only what is apparent and static in behavior. Because they can only indicate

aspects of behavior, such approaches, in her view, tend to stifle the dynamics of human behavior. Instead, she favors theories which recognize the invisible, latent forces that influence individual behavior in social situations, and which cannot be encompassed in a fixed, static characterology. Characterology, as utilized by Massucco Costa, is a social psychological method of analyzing a specific situation and studying its inherent elements.⁶

Within this context Massucco Costa offers her milieu theory (*concezione ambientalistica*), and criticizes constitutionally determined characterologies, as, for example, that of Le Senne. She accepts the limitations which constitution may place on personality development, but believes that these factors are pliable and that the individual has it within his power to achieve some modifications or change. Of at least equal if not greater importance are the environmental limitations to personality development. These are expressed in the social milieu, encompassing education, culture, and economic circumstances. Character is not a cross-section of many elements but rather the result of slow longitudinal development, as has been repeatedly demonstrated by the depth psychologies.

Massucco Costa's views also cast some further light on fundamental aspects of Italian psychology. As mentioned previously, it must be understood that attempts to study problems of personality were long hindered by the officially favored spiritualistic and idealistic philosophy, owing to a too thoroughly positivistic psychological approach. Opposition also stemmed from the widespread attitude that only philosophy had the right to concern itself with human behavior. Psychology was not accepted as a science, only as a useful method of working with practical problems. It appeared at first that it might be desirable to create a separate and distinct psychology, apart from philosophy, which on the foundation of English empiricism, physiology, and psychophysics could establish a future of its own.

Massucco Costa shared this view. Recently, however, other psychologists, such as Gemelli's student Zunini, have observed that too radical a separation of psychology and personality re-

search from philosophy is both questionable and dangerous.¹ The tendency to bridge the gap between scientific psychology and philosophical aspects involved in personality research is becoming increasingly apparent in Italian psychology. There is an effort to understand active reciprocal influences, not only between isolated physical and psychological processes, but also between the cultural, social, familial, and physical environment and the individual being or group.

SUMMARY

The latest developments in Italian psychology, in its striving for a position of independence from philosophical currents, have been described. Building on the basis of an autonomous psychology, such authors as Gemelli and Massucco Costa developed an appropriate personality theory, rejecting static approaches and favoring a dynamic concept. The views of Pende were presented as representative of a scientist unwilling to renounce the close ties between personality theory and philosophic foundations. Finally, it was noted that Zunini and, in recent times, other Italian psychologists, have also been reluctant to consider the autonomy of psychology as absolute.

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VI

**Current French Concepts
of Characterology and
the Study of Character**

MORE THAN TEN YEARS AGO Mounier contrasted the Cartesian traditions of French psychology to the emphasis on depth advocated by many German psychologists.⁸ He held that French distaste for verbal exuberance and obscure concepts was a negative virtue, and at most an excuse. While resistance to Freudian views, in some French circles, has been due to insistence on common sense, intellectual sanity, and a taste for vigor, it has also been sustained by an increasing reluctance in the humanities and social sciences to question the nature of man or to offer fresh speculations.

Mounier's appeal for a science both lucid and bold echoes the earlier pleas of Wallon, who in 1933 pointed out the necessity of going beyond the mechanistic and finalistic in psychology.¹⁰ Wallon defined the problem of character as particularly representative of the contradictions and antitheses from which psychology suffered.

In this chapter I shall attempt to comment briefly on some recent trends in French concepts, varied approaches to the study of character, and the important role of Le Senne's philosophy.

WALLON AND MOUNIER

Wallon expressed the view that the dissatisfaction of those who finally sought to resolve their problems in metaphysical speculation, was an indication of the need for a complete revision of old categories and distinctions.¹⁰ It was readily apparent that, when stripped of their mysticism, such speculations often expressed aims toward which scientific research is directed.

From his wartime prison Mounier wrote of contemporary psychology's invasion by the violence of the libido and the tumult of impulse.⁸ Born of a decadent society, this psychology both embodied and betrayed the legitimate demands for an integration of science and action, for facing the problems of will and conscience, and for the whole study of living man.

Both Wallon and Mounier struck at the central core of the problem, the study of character and personality. Wallon had begun his authoritative work with an investigation of character; Mounier reaffirmed the fact that psychology begins on the threshold of characterology. The atheistic materialist and the Christian personalist were aligned in the common fight against the sclerosis of the scientific spirit and the betrayal of man's deepest aspirations in search of his destiny.

CURRENT TRENDS
IN THE STUDY OF CHARACTER

In the period immediately following World War II, the work of French psychologists in the study and diagnosis of character had no distinctive features, either good or bad. The techniques were the same as those used by psychologists in other lands. This was exemplified by the symposium on *L'Etude objective du caractere*, published in 1947 by the Institut Nationale d'Orientation Professionnelle, which discussed projective techniques, graphomotor methods, drawing tests, questionnaires, and the

like.⁷ At about the same time, a number of factor analyses of character appeared, dealing particularly with fluency and perseveration. A diversity of techniques was described, corresponding to the multiplicity of problems, which, in the excitement of the newly found peace, produced an impression of richness and exuberance of new ideas. Criticism was promptly directed at these techniques, however, often on the ground that they were not yet sufficiently objective. Pieron, in his preface to the symposium, voiced considerable reservation about those so-called tests in which subjective elements in interpretation play a by no means negligible role.⁸ It was regrettable also that the diversity of techniques was accompanied by a diversity of concepts. This created great confusion because, as Fraisse noted, "the different concepts are not independent and their inter-relationships are badly defined."⁷

In essence, in France as elsewhere, the activity of psychologists often seems to present the spectacle which Mounier described as "scraping the surface here and there and enumerating the features of the landscape."⁸ The central notion of character is employed with a disconcerting multiplicity of meanings, suggesting that it still belongs more to the domain of metaphysics than to that of science. For some, like Paul Guillaume, character is distinguished from personality as the analysis of elementary traits is distinguished from the consideration of a totality of which one of the principal aspects is consciousness of the self. For others, on the contrary, it is the notion of character which expresses mental life as a dynamic unity in contrast to the unalterable factors of constitution, morphology, and temperament. Still others hold that character is the hereditary unchangeable structure which subsists beneath apparent change and development. Conversely, character is also considered by some as essentially a tissue or network of social relations. "To be, in the sense of character," says Palmade, "is to exist for others."⁷ The majority of psychologists, however, make no adequate distinction between the terms character, personality, and "*affectivité*."^{1, 4}

Pieron, who all his life has striven for lucidity and clarification,

undertook the task of reducing the current confusion. He showed why attempts at characterology were faced, semantically, with an extraordinarily confused mass of material: "Our civilized languages have in this domain remained at the same stage as primitive tongues in the description of natural phenomena. They contain a plurality of differentiated locutions designating specific and incomplete aspects of value judgments and do not have conceptual, general, and objective terms."¹⁰ For Pieron, character in the individual personality is the group of traits associated with emotional life. He refuses to separate personality from individuality: "In view of the unity of any organism such a dissociation is totally unjustified. The human organism, in its bio-social life, is a person, appearing in what is peculiarly its own, and in what distinguishes it from others as an individuality." In this way Pieron expresses one of those fundamental attitudes of rationalism and objectivity which for fifty years have marked French psychology, an attitude which he has transmitted to the majority of his students at the Institut de Psychologie of the University of Paris.

THE PHILOSOPHY OF LE SENNE

The characterology which has been growing since the war under the leadership of Rene Le Senne⁶ has quite a different background. It is the work of men who are primarily philosophers, moralists, and educators, including Gaston Berger, Professor of Philosophy at the University of Marseilles; Pierre Mesnard, Professor of Philosophy at the University of Algiers; Andre Le Gall, Inspector General of Philosophy, and others.^{2, 3, 5} Psychologists as such do not take part in their movement. Le Senne is an able writer whose ideas are clear and whose expression pure, so that there is no danger of misunderstanding. He looks to common sense to provide the elements of an objective characterology. The "rule of concordance" which he proposes consists simply of identifying those elements which are common to

all the work dealing with differences of character between men. He adopts the characterological typology of Heymans and Wiersma, the Groningen psychologists who attempted to identify, collect, and systematize such elements. Following their suggestions, Le Senne distinguishes three constituent properties of character: emotionality, activity, and primary and secondary reinforcement (*retentissement primaire et secondaire*). The combination of these three properties produces eight fundamental characterological types.

In order to establish an objective science—and this no doubt is his essential contribution—Le Senne draws radical distinctions between character, personality, and the self. Character is defined as all those congenital dispositions which form the mental framework of man. Character is the body in its highest unity and also in its most rigorous determinism, the result of the Mendelian action of hereditary factors. Personality is considered the concrete totality of the self, of which character is only the invariable substructure. The self is the active free center which, on the foundation of character, produces the personality.

Of these three terms, character, personality, and self, the first two are objective, the third gives them existence. Thus, Le Senne has built a philosophic system within which the objectivity of the science of psychology is defined, at the extreme, by the immutability of organic conditions and by a rejection of history. Character is the more solidly fixed in an impenetrable objectivity, in a rigid materialism, because the principle of history and of growth is inherent in what essentially escapes scientific investigation—'the eternal presence of the self'.

Although at variance with generally accepted teachings, Le Senne's characterology has attracted an increasingly large number of adherents due in part to the clarity of its definitions and the simplicity of its combinatorial procedures. Most professional French psychologists, however, have not taken it seriously. When they do condescend to consider it they criticize various aspects. From the statistical viewpoint, they note the pseudo validation of the traits of character; from the descriptive view, they attack

the atomistic assumptions underlying the combination into types; and they point to the weakness of an explanatory system with its complementary postulates of materialism and spiritualism, since biological fixation demands a freedom of will which ultimately escapes scientific investigation.

A disciple of Le Senne has cited studies by Wallon as confirming the authenticity of the former's thesis, but the method and the work of Wallon contain nothing, in my opinion, which supports Le Senne's characterology. It is true that Wallon, whose work is the most considerable French contribution to the study of character, has indicated that physiological conditions and particularly motor factors are "most fundamental" for the study of human behavior; like Pavlov, he is at pains to show that it is improper to consider a living being apart from its reactions, and that those reactions cannot be considered apart from the circumstances which cause them—the environment. Traditional physiology, which studies the organism and its different functions in isolation as if they were individual systems each having specific excitants and reactions, commits the error of studying circuits which are broken and dead because those very stimulants which make life possible for the organism are missing.

For the human being, the most important environment for the

Each individual has a different motor balance but Wallon, studying different forms of balance, succeeded in describing psycho-motor types. His argument is thus radically different from Le Senne's. He holds that character has its origins in the conditions of its biological and social existence. Consciousness and self are not included as explanatory principles but are themselves the consequences of growth, of ontogenesis. They are effects which in turn become causes in the difficult conquest of liberty and autonomy.

SUMMARY

The time has come, in France as elsewhere, when interest must be focused on the emotional and volitional aspects of human personality. A distinction should be made, however, between those who pursue the experimental study of character and those who set themselves the task of erecting characterologies. The shade of difference in meaning is, I believe, important. Those who pursue the experimental study of character, too often, perhaps, identify reality with their instruments of analysis. Characterologists certainly do not embarrass themselves with instruments. They decide by decree of definition, claiming to align themselves squarely with reality, and speak of dynamism and concreteness. But it is not sufficient merely to talk of these things in order to bring them into the realm of science. The question must be raised as to whether the very notion of characterology, postulating as it does a domain apart, does not break the essential unity of psychology, the true wholeness of man which it is our purpose to establish.

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* The reader is urged to consult the original French sources for the full flavor of the quotations translated in this chapter.

Part III

Theory

VII

**Neuro-humoral
Factors and
Personality**

IT IS A BASIC ASSUMPTION that psychological functions in living organisms cannot occur independently of physiological processes, or without the involvement of some organic structure. This would mean that psychophysiology is not only concerned with neurological, endocrinological, or metabolic aspects of behavior, but with all aspects of life processes. While such a holistic point of view would be applicable at every stage of pre- and postnatal development, this chapter will be limited to a consideration of only a few theories, studies, and references dealing with the neuro-humoral system and considered relevant for personality theory.*

HOMEOSTASIS AND INTEGRATION

The specific relevance of neurology to personality theory has been debated,^{6, 25, 40-42, 101, 110} advocated,³⁹ and criticized.³⁶ While some have held neurological or physiological concepts too limited and rigid for psychology,³¹ others have suggested or attempted to expand such concepts to meet the requirements of behavioral

* Literature published after the Fourteenth International Congress of Psychology has not been included in this survey.

theory.^{16 18 39 66 69 73 78} Of particular interest have been the mechanisms and individual differences observed in those activities which serve, within a restricted range, to maintain such constancy of the internal environment that external fluctuations become a matter of relative indifference.²³

Only seventy years after Bernard postulated that "*La fixité du milieu intérieur est la condition de la vie libre*," Cannon succeeded in documenting the multi dimensional functional interrelationships of this regulatory principle, which he termed "homeostasis".^{10 21} A further step was taken by Hess,^{45 46 50} whose experimental studies elaborated the functional organization of the autonomic nervous system⁴⁷ and the diencephalon.^{48 49} By linking homeostatic mechanisms with the fatigability and need for recreation of central nervous activity (rhythmic changes in sleep and wakeness), Hess distinguished different levels of homeostasis, "comprising the entire behavior of the individual".⁴⁹

Based on the concept "that an organic phenomenon is not the summation of a number of separate processes, but their integration into a functional system according to definite laws,"⁴⁹ Hess postulated a theory (Figure 1) which is relevant not only to "organic" phenomena, but also to behavior and mechanisms, e.g., sleep, wakefulness, atony, adynamia, affectivity, motor responses, etc. Experimental results, gained by stimulation in the diencephalic area, suggest theoretically the interaction of two zones linked with different levels of homeostasis. The activities of the dynamic or ergotropic zone, (middle and posterior part of the diencephalon extending to the central gray matter of the mesencephalon and anterior rhombencephalon), "go with a general excitation and those mechanisms which physiologically belong to bodily work" (ergotropic functions), corresponding largely with sympathetic activities. This zone represents a link in the sympathetic nervous system serving as a collective mediator between the diencephalic and autonomically innervated organs. The endophallic or trophotropic zone, (rostral part of the hypothalamus, area praenoptica, supraoptica septum), stands "in intimate relation to protective mechanisms and endocrine"

(e.g., vomiting, defecating, etc.) and may be evoked by individual stimuli. The manner in which ergotropic and trophotropic nervous activities may interact and regulate the homeostatic level by changing their focus of excitation, as in alternating states of sleep and wakefulness, is illustrated in the schematic representation of Figure 1.^{46, 62, 63}

Theoretically, Hess conceived of the state of sleep as acting as a means of preservation of energetic resources and restitution of achievement capacity (*Leistungsfähigkeit*), and as belonging to the trophotropic functions of the nervous system. Since Hess found that diencephalic autonomic systems influence cortical and subcortical functioning and succeed in inducing sleep by

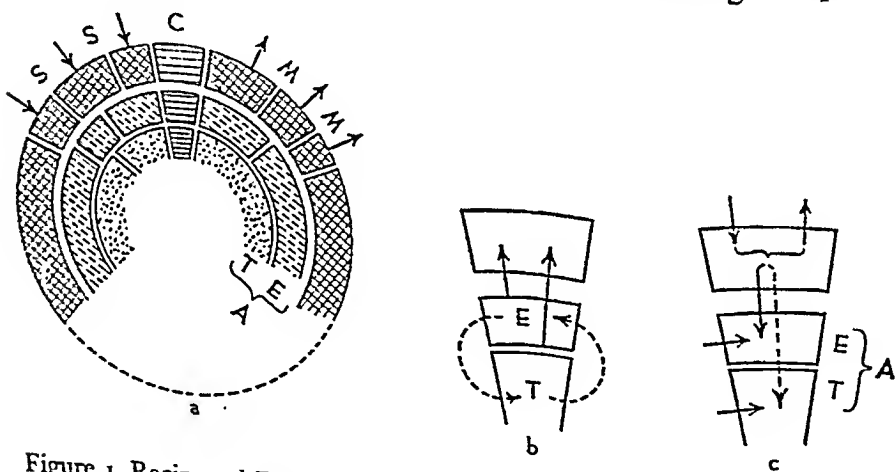


Figure 1. Reciprocal Effect of the Somatic and Autonomic Nervous System

Abstract representation of the functional structure of the organism. a. The outer circle represents the somatic functional system which registers environmental conditions involving (S) sensory, (M) motor, and (C) central performance. The two inner circles correspond to the autonomic functional system. (E) Ergotropic functions favoring the readiness for somatic achievement. (T) trophotropic functions concerned with discharge, protection, and healing. *Reciprocal effect of the systems within one sector.* b. The ergotropic sector favors the readiness for achievement of the somatic system, the trophotropic sector enhances the recuperative processes of recreation and, therefore, inhibits the ergotropic and somatic activity (— activation; inhibition). c. The processes of excitation of the somatic system activate the ergotropic and inhibit the trophotropic sector of the autonomic system. Both functional autonomic systems are also (→) influenced by milieu conditions of the tissue. (Schematic representation after W. R. Hess, 1933.)

stimulation of certain medial parts of the thalamus, he localized a trophotropic apparatus of sleep and wakefulness rhythm in this area.⁵⁰ This is in agreement with the more recent results of Jasper on the integrative action of the thalamic reticular system (Figure 2).⁵⁵ Nor is it contradictory to Bremer's view that "the cerebral cortex participates actively in its own arousal and in the maintenance of its waking state by the corticofugal impulses which it sends to the brain stem reticular formation," and that "the physiological process of falling asleep may be explained . . . by the cumulative de-activation (defacilitation) of the encephalic neuronal networks resulting from synaptic fatigue and favored by a reduction in the exteroceptive and proprioceptive sensory afflux."¹⁵

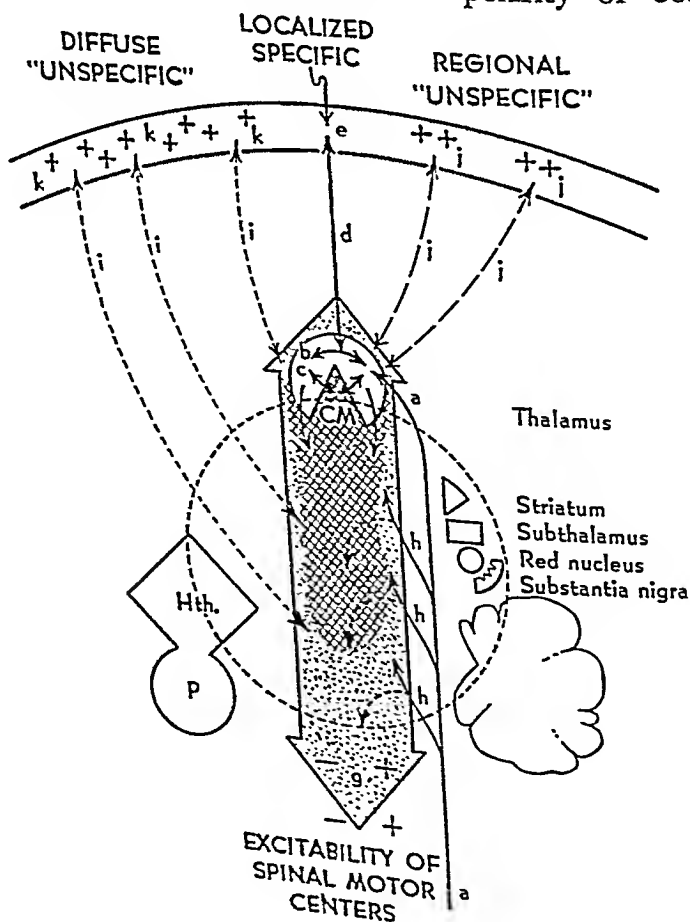
Cannon's concept of homeostasis and the work of Hess may be considered fundamental contributions to the understanding of motivational aspects of personality.^{50, 63, 132} They gain still more significance in the light of von Bracken's "egokym theory,"⁸⁻¹¹ recent work on the brain stem "ascending reticular activating system,"^{83, 92, 93, 105, 106} and the concept of the "centrencephalic" system of Penfield and Jasper.^{60, 113}

The demonstrated co-existence of an "unspecific"⁸³ and diffuse reticulocortical projection system, relatively independent of previously known specific projection systems and regarded as the central controlling mechanism for states of consciousness,^{60, 63, 93, 112, 113} has considerably advanced the understanding of subcortico-cortical interrelations.^{23, 59} Recordable electrical activities of central nervous structures belonging to different phylo- and ontogenetic levels reveal the integrating role of the brain stem reticular network and its particular upstream (activation, arousal mechanism) and downstream (facilitating or inhibiting) effects on the postural tonus.^{15, 32, 60, 82, 91, 94, 105} These and other findings concerning cortical-subcortical interconnections led to the proposal of a hypothetical centrencephalic system, responsible for the over-all integration of central nervous processes.¹¹¹⁻¹³

NEUROPHYSIOLOGY AND PERSONALITY THEORY

Present knowledge of the physiological properties of the brain stem reticular system in connection with sleep and wakefulness,^{15, 27, 32, 50} the relation of EEG arousal reaction to mental activities,^{63, 112, 113} and the "mechanism for focusing *conscious processes* (thalamic portion) upon specific local cortical functions"^{5, 60, 102, 113} invite personality theorists to clarify their corresponding concepts and theoretical constructs.

Phenomenologically oriented theorists have tried to bring their views of personality organization into close correspondence with neuroanatomical and neurophysiological findings, especially since Carus stimulated interest in the polarity of conscious-



unconscious (*Bewusst-Unbewusst*). Concepts like *Kortikalperson* and *Tiefenperson*,^{67, 135} ego and id,³⁰ *personeller Oberbau* and *Endothymier Grund*,⁷⁰ *Oberbewusstsein-Unterbewusstsein*,¹⁰¹ *bewusst* (*kortikale Instanz*) and *vorbewusst*,¹³⁰ *Ross und Reiter*,¹²² *Unter und Oben*, *Eshaftigkeit und Ichhaftigkeit*,¹³⁰ are, together with developmental aspects, considered as more or less directly linked to a neurophysiological substrate.

Some theories of "vertical stratification" (*Schichtentheorien*) departed originally from the polarity of consciousness and unconsciousness and tried to fit, in betweco the extreme states of conscious control,¹³³ a number of other strata. How valid some of these personality theories are in regard to neurophysiological and other findings cannot be discussed here. However, many results of neurophysiological research of the last decade⁹⁵ may

Figure 2 Functional Relations of the Brain Stem Reticular System

Thalamus receiving (a) principal sensory pathways, showing (b) intrathalamic and (c) thalamo-reticular connections, sending (d) specific sensory projections to (e) localized receiving areas of the cortex, these afferent impulses provoke localized "specific" cortical responses ("evoked potentials") which are limited to the time of stimulation (d) Cortico thalamic return connections

The brain stem reticular system stippled area with (i) its separate "nonspecific" and diffuse facilitative system of "vertical" to-and fro interconnections with all cortical areas, its integrating connections with specific subcortical structures (within the dotted circle), e.g., striatum subthalamus, red nucleus substantia nigra, hypothalamus cerebellum, and its (g) inhibitory (medial bulbar region) and facilitatory (lateral bulbar region) projections upon spinal motor centers (h) Collaterals of the (a) principal sensory pathway enter the reticular system (thalamic portion basal diencephalon or lower brain stem) Afferent impulses traveling this course initiate I *upstream*, the primitive arousal mechanisms (k) to all cortical areas, even after destruction of specific sensory thalamocortical projection systems The thalamic reticular (intralaminar) system is highly specialized (topographically organized) and may provoke (j) regional "nonspecific" effects and (k) diffuse "nonspecific" effects, II *downstream* participation in excitability of (g) spinal motor centers The centrencephalic system (cross hatched area) (neurone system in the central core of the basal diencephalic and mesencephalic portions of the brain stem), with equal functional relationships to both hemispheres, is held responsible for integrating all processes of the brain as a whole It "corresponds, at least in part," to what Magoun *et al.*, called the "ascending reticular activating system"

CM *Centrum medianum* of the thalamic portion closely connected with the corpus striatum IIth *Hypothalamus*, the posterior part of which is found to be in close connection with the reticular integrating system. P *Piriform*

be regarded as encouraging and stimulating the creation of new, or modifying old, theories of stratification.^{50, 79, 101, 114, 122, 134} When, for example, Lersch⁷⁹ distinguishes four levels of experience (*Aktualitätsstufen des Erleben*), as significant for the functional changes between "sleep or coma" and wakefulness,⁶⁷ it might be useful to compare such concepts with the underlying functional states of significant EEG patterns and other neurophysiological data^{32, 63} during variations in states of consciousness^{33, 92, 118} as illustrated in Figure 3. It may thus be possible to arrive at more realistic definitions and conclusions.^{27, 42, 70, 72}

As a more realistic physiological approach to personality

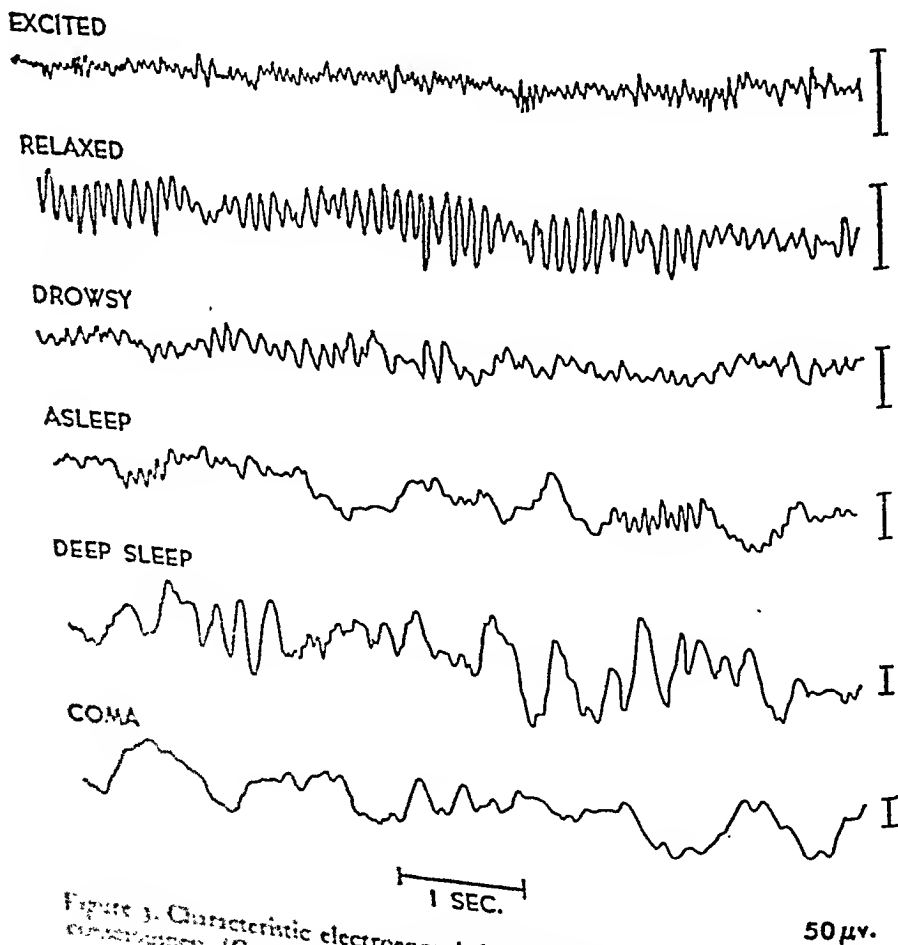


Figure 3. Characteristic electroencephalograms during variations in states of consciousness. (Courtesy of Penfield and Jasper, 1954, p. 188.)

theory, Lindsley postulated a new theory of emotion, incorporating earlier and more recent studies of the brain stem reticular system, the hypothalamus, and other cortical and subcortical structures.⁸¹ This "Activation Theory of Emotion" rests mainly on changes of the EEG pattern during extreme emotional changes (see top line, Figure 3); corresponding results gained by stimulation of the upper brain stem reticular formation; and observation after destruction of the basal diencephalon including the rostral part of the brain stem activating system.⁸² According to Lindsley the following structures and pathways are probably involved in emotional behavior (see keys of Figure 2): a; d; visceral afferent pathways; centripetal projections of reticular formation (to thalamus); i; interconnections of hypothalamus and thalamus; b; intracortical connections; cortico-hypothalamic pathways; hypothalamohypophyseal tract; corticospinal pathways. The cerebellum and certain basal ganglia may also participate. Lindsley's theory appears to account for extreme states of emotion, but leaves "intermediate and mixed states relatively unexplained as yet."⁸³

It is within this context that it seems necessary to emphasize that the nervous system is floating in what may be called the "humoral system" and that we are dealing with *one neuro-humoral system*. There can be no doubt that specialized investigations on neural networks, structures, and centers are important in advancing understanding of behavior. No less important are studies concerned with the functional changes in nervous structures intimately tied to changes in the humoral milieu.^{7, 13, 53, 110, 137}

From observations under normal, experimental, and pathological conditions, data have been obtained showing a rough outline of neurophysiological changes and corresponding behavior manifestations associated with humoral variations of calcium, oxygen, carbohydrates, ACTH, and other chemical substances.

* Hebb's latest speculations that "Arousal . . . is synonymous with a general drive state" and that "The conception of drive therefore assumes anatomical and physiological identity,"⁸⁴ were not available at the time this chapter was prepared.

metabolic derivations or endocrinopathies.^{7, 13, 22} The neurophysiological effects of such humoral deviations,^{1, 38, 131} as reflected, at least partially, by behavior changes,^{7, 52, 80} may be classified generally according to the dimensional directions along which such changes develop in the majority of subjects. The directions may be different or similar for various chemical substances. Other substances may cause behavior changes along rather specific dimensions.¹⁰¹ Apart from such general trends there are more or less significant contributions of the individual's underlying behavior pattern, which may appear as exacerbated versions¹⁶ or as the release of latent emotional responses.^{24, 35}

Knowledge about the detailed action of humoral substances on the function of specific nervous structures is still limited.^{12, 13, 29, 93, 129} There are no factual and realistic explanations of why and how this or that substance produces such and such a general or selective "psychological" effect,^{13, 93} or why and how a number of chemically different substances or states (e.g., ACTH, anoxia, glutamic acid, alcohol) initiate similar changes (e.g., in complex motor organization as revealed by EEG).⁸⁶⁻⁹⁰

It may be assumed that there is a relation between Hess's trophotropic and ergotropic levels of homeostasis³³ and the activity of the brain stem reticular formation,^{2, 32, 50} which may be "tuned" to induce diffuse and regional (thalamic portion) activation of cortical activity.^{14, 15, 54, 64, 93} The mediating and integrating role of the centrencephalic system also appears involved.¹¹² However, the interaction of specific humoral concentrations and general or more selected nervous activities awaits further explanation.^{7, 13, 53} It is in this context that, for example, Lehmann's observations of physiological and psychological stress and the psychophysiological effects of certain endocrine and pharmacological substances (ACTH, barbiturates, chlorpromazine, etc.) on psychiatric patients gain importance for theoretical aspects of personality. Drawing attention to the experimental work of Magoun and other investigators, and applying their neurophysiological observations to the reaction of psychiatric

patients, Lehmann suggests that certain of the newer drugs may exert a selective inhibitory action on psychomotor functions concerned with drive and affect, which find their anatomical representation in the brain stem reticular system. This points to promising experimental possibilities which may contribute to the understanding of neurohumoral interaction and personality dynamics.^{33, 38}

NEURO-HUMORAL PERSONALITY AND ADAPTATION

It seems likely that every individual has a unique "neuro-humoral personality" and that the interaction of humoral and neural factors,^{63, 101} on the basis of trophotropic and ergotropic levels of homeostasis, has to be considered when dealing with personality problems.^{39, 101} Psychophysiological processes should be considered primarily from the aspect of functional adaptation. I agree with Klein and Krech who advocate a holistic view and regard "all behavior within the context of the total organism."⁶³ A useful behavior theory "must instantly view all the processes of the organism as adaptive and must just as instantly seek a basis for 'how' and 'what' explanations thereof."

It is along this line of approach that pathophysiological experiments and clinical observations may contribute effectively to the better understanding of personality dynamics. The physiology and pathology of exposure to stress, as viewed from the concept of Selye's "General-Adaptation-Syndrome,"¹²³ contain important fundamental ideas, of interest not only for pathology but also for psychology in general and the domain of personality in particular.¹²³ Since Selye's theory is not a psychological one, developing rather from clinical and pathophysiological experience, it has apparently escaped the general attention of psychologists, and will be briefly stated here.

"The sum of all those non-specific, systemic reactions of the body which ensue upon long-continued exposure to stress has

been termed the 'General-Adaptation-Syndrome.' It is characterized by a number of morphologic and functional changes. . . . If an individual is continuously exposed to stress, the resulting general-adaptation-syndrome evolves in three distinct stages:

"1. *The Alarm Reaction*, which is defined as the sum of all non-specific systemic phenomena elicited by sudden exposure to stimuli to which the organism is quantitatively or qualitatively not adapted. Some of the phenomena are only passive and represent signs of damage or 'shock' (e.g., hypothermia, hypotension, hemoconcentration, increased capillary permeability, hypochloremia, depression of the nervous system); others are manifestations of active defense against shock (e.g., adrenal-cortical enlargement, increased corticotrophin and corticoid production, hyperchloremia). If the eliciting stress is of medium intensity, the alarm reaction tends to evolve in two distinct phases, the phenomena of shock being followed by those of countershock. However, in most cases the manifestations of shock and defense are inter-mixed; indeed the sequence of events may even be reversed (e.g., in the case of progressively increasing fatal stress). Here some counter-shock develops first, when the body can still resist, but subsequently shock-manifestations become increasingly more prominent as the augmenting intensity of the stress makes further resistance impossible.

"2. *The Stage of Resistance* is defined as the sum total of all nonspecific system reactions elicited by prolonged exposure to stimuli to which the organism has acquired adaptation. It is essentially a 'protracted counter-shock.' Resistance is increased to the particular agent to which the body has been exposed, and this is usually accompanied by a marked decrease in resistance to other types of stress. The impression is gained that during the stage of resistance, adaptation to one agent is acquired 'at the expense of' resistance to other agents.

"3. *The Stage of Exhaustion* represents the sum of all non-specific systemic reactions which ultimately develop as the result of very prolonged exposure to stimuli to which adaptation had been developed but could no longer be maintained. By defi-

nition, any agent capable of producing an alarm reaction is an 'Alarming Stimulus.' Agents causing merely local damage, which requires no general adaptive adjustment (e.g., amputation of limbs) are relatively mild alarming stimuli, while those which evoke intensive adaptive responses (e.g., cold, solar or roentgen radiation, muscular exercise, nervous stress, fasting, infections, intoxications) produce severe alarm-reaction symptoms. The alarm reaction is not necessarily a pathologic phenomenon since it can be elicited by mild exposure to stress, which is unavoidable in the course of every-day life."¹²³

The problem of an individual's functional adaptation³⁸ is ultimately a dual one, dependent on exigencies arising from the particular multi-dimensional constellation of the individual himself and his particular environmental constellation.³ Since all psychophysiological processes contribute more or less directly in dealing successfully with the continuity of such twofold adaptational exigencies, it seems that the emphasis generally put on the nuclear role of the anterior pituitary-adrenocortical axis is too narrow a concept.^{103, 120} This is especially so when trying to link ego functions intimately with activities of this anterior-pituitary-adrenocortical axis.¹²⁰ There is now enough experimental and clinical evidence that adaptational reactions to all kinds of stress are not limited to a so-called physiological level, but rather involve the individual as a whole.^{18, 97-99, 103, 107, 124-29, 140}

Reactions to stress are complex psychophysiological processes involving psychodynamics as well as metabolic or any other functional mechanisms of a living individual.^{113, 116} Their nuclear role may be ascribed to an integrated coordinating autoregulative neuro-humoral axis, which includes: cortex, the brain stem reticular (and centrencephalic) system, the hypothalamus, the pituitary, and the adrenal cortex.

The activity of this neuro-humoral axis is of direct concern for personality studies since it is fundamentally responsible for the reflection of what results from: (a) the individual's genetic constellation of multi-dimensional functional possibilities (and impossibilities); (b) effects arising from processes of regulation

and modification within the frame of possibilities of (a), having already occurred during previous phases of life as a result of particular correspondences between the individual's and the environment's constellation;^{42, 44, 61} and (c) the individual's present state, resulting from the particular correspondence between his functional constellation and what is given by the environmental constellation. (What is here termed "constellation theory" is a global approach to the understanding of personality; it is not identical with Rohrer's similarly phrased concept¹¹⁹ and will be elaborated in greater detail elsewhere.)

Apart from the functional significance of the neuro-humoral axis for the understanding of behavior, personality studies should consider that neuro-humoral and other structures and mechanisms are ultimately only prerequisites for the further realization of general phylogenetic and specific individual functional possibilities, as these are primarily determined by the individual's multi-dimensional genetic constellation.^{17, 68} Organic structures are themselves already functional realizations, the topological relations of which should be given adequate consideration: "It should be apparent that the genes cannot control directly a psychological trait, e.g., maze-learning ability; they only exert an influence through the mediation of physical structures."^{37, 71} Genetics in general and psychogenetics in particular have already produced enough evidence to justify the conclusion that genetic forces are extremely important in shaping the fundamental psychophysiological destiny of the individual.^{37, 130} However, within a multi-dimensional genetic frame of functional possibilities (and definite impossibilities), all processes of functional (and structural) realizations and modifications, during the entire life span, result from the particular correspondence (or non-correspondence) of an individual's genetic constellation with what is given by the environment.^{3, 26, 107, 135}

SUMMARY

The relevance of neurological and humoral factors for personality theory has been the central theme of this chapter. I

have considered Cannon's concept of homeostasis, the work of Hess on diencephalic autonomic regulations (diagram), recent studies on the brain stem reticular (and centrencephalic) system (diagram), and Selye's concepts of 'Stress' and the "General-Adaptation-Syndrome." Emphasis was placed on the mediating nuclear role of a neuro humoral axis (cortex, brain stem reticular and centrencephalic system hypothalamus, hypophysis adrenal cortex), considered of direct concern for the reflection of interaction between an individual's genetics and environmental constellations

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have considered Cannon's concept of homeostasis, the work of Hess on diencephalic autonomic regulations (diagram), recent studies on the brain stem reticular (and centrencephalic) system (diagram), and Selye's concepts of "Stress" and the "General-Adaptation-Syndrome" Emphasis was placed on the mediating nuclear role of a neuro-humoral axis (cortex, brain stem reticular and centrencephalic system, hypothalamus, hypophysis, adrenal cortex), considered of direct concern for the reflection of interaction between an individual's genetics and environmental constellations

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**Personality Growth:
Conceptual
Considerations**

IN THIS CHAPTER I shall review the concept of growth, stating propositions which seem to apply equally well to physiological and to psychological growth. Implicit in the material presented is a concept of the dynamic relationship between the organism and the environment. Two kinds of circular behavior, the growth circle and the vicious circle, will be contrasted, compared, and related on a continuum of degrees of environmental domination. Supporting research will be cited.

Psychological entropy, or the degradation of energy, will be reviewed for its relation to the Closed System in the second law of thermodynamics and to Life—the Open System.

Space limitations have necessitated certain omissions. There is no detailed consideration of motives, as is provided, for example, in Nuttin's excellent chapter in this volume or in Adam's paper.² Nor is appropriate attention given to the varied concepts of the internal structure of the person, as in Freud's id, ego, and super-ego, Allport's proprium,³ or Colby's psychic apparatus.⁴ There is no review of pertinent neurological and physiological research, so ably documented by Luthe, but the concepts presented here seem consistent with his concluding generalization concerning the interaction of an individual's genetic and environmental constellations.

The assumptions underlying the material presented herein seem appropriate for all science. There is selectivity and distortion in all perception, error in all measurement, confusion in all communication, and relativity in all constructs. Absolutes exist only by definition, as the fancies of finite minds or the constructs of closed systems. Everything which a psychologist discusses exists in degrees and can be counted, measured, assessed, or evaluated, as more or less. Units are, to be sure, fuzzy in their boundaries and dimensions, but are useful and necessary for thinking and for communication. Facts are tentative; they represent the best we can establish for the present. Qualitative data usually represent highly inferential material or percepts of unknown reliability and validity. Constructs are attempts to give tangible, symbolic representation to inferences of today; tomorrow they too will be revised, modified, replaced, or, having served their purpose, abandoned.

Science is a process in which perceptions are sharpened, errors of measurement reduced, channels of communication opened, new relationships revealed, and present ideas relinquished. Science is a progressing process of differentiation and integration in the thinking of scientists; it is the emergence of originals through the free interplay of differences. Science is a process of growth. The concepts introduced here are, therefore, transitory. Any of them can be changed, improved, or abandoned.

PHYSIOLOGICAL GROWTH

The newborn human infant is a bundle of energy. From the moment of conception he has been capturing energy from his environment, organizing it, storing it, and expending it. By the time of birth he has multiplied a millionfold the size of the original one-celled fertilized egg from which he started.

There are two generally recognized aspects of growth that are important both in physiology and in psychology. Growth is at once a differentiation (creation of differences), and an inte-

gration (organization) of differences. In addition to differentiation and integration other characteristics of growth may be postulated. An illustration from biology, the fertilization of an egg and its subsequent development, will facilitate the definition of a number of terms and propositions equally applicable to psychological growth.

Growth is a process of differentiation: The one-celled fertilized egg is different in structure and function from anything that has ever existed before. It is a differentiated and differentiating organism. Instead of mere reproduction of the structure and function of the original fertilized egg cell, there appear cells that become, for example, nerve tissue, muscle tissue, bone tissue, and glandular tissue. Each of these cells is different from the others and from the parent cell in structure and function. Yet through their chromosomes they are all said to have the same biological heredity. Differentiation is, by definition, the emergence of originals, the creation of differences. Growth is a process of creativity.

Growth also comes about through an *integration of differences*. As physiological growth tends to achieve an increasing development of individual differences, there is also a continued trend toward integration. The body lives and grows as a more or less integrated organism. The nerves are not rigid and inflexible, but are responsive to the heart, the bones, the muscles. The glands are flexible in their sensitivity to the needs of the other parts of the body. There is a common purpose among differences implied in the biologists' discovery that the individual acts as a whole. There is an expenditure of energy by the parts in such a way that the needs of the entire body tend to be satisfied. Integration likewise, by definition, is the emergence of originals, the creation of differences; again growth is a process of creativity.

Differentiation and integration are not found separate in nature; they are inseparable. In biology, relatively high degrees of functional unity, organization, and integration are essential to relatively high degrees of differentiation, specialization, and creativity. There are cells, one-celled organisms, protozoa, which

subdivide and reproduce but do not cohere or integrate with other cells. They are still in the swamp. In the course of evolution man has emerged as the self-styled highest form of animal life. We cannot impute cause in one or the other of two inseparable aspects of growth. We cannot say that the biological harmony of the parts, the working with each other in a common biological and organismic purpose, has permitted the high degrees of differentiation found in man. We can say only that psychologists and educators have stressed differentiation, often to the neglect of integration. Differentiation is usually discussed first, and integration second.^{2, 8, 49, 58} This emphasis has probably produced pedagogical confusions; we give prizes to valedictorians, but are unconcerned with group process.

Differentiation and integration encompass other propositions for biological and psychological growth. In the process of conception there is a confronting of differences between the spermatozoon and the unfertilized egg. Confronting is defined as a situation in which the behavior or presence of one organism makes a difference in the behavior of another. In conception there is also a free interplay of differences. The unfertilized egg and the spermatozoon are each free to be and to behave as they are. Without this "freedom" and without this "behavior" each loses its identity as an organism in a process not of integration, but of disintegration. *Growth is an abandoning, a yielding, a giving-up of an organism's momentary structure and function "as they are," for new structures and new functions that are in process of emerging.*

Growth is a spontaneous, "voluntary," non-coerced process: Abandoning, yielding, giving-up can occur under two quite different relationships: one in a situation of conflict; the other in a situation where conflict is negligible or meaningless. The situation easier to imagine or to postulate is a relationship of coercion, force, pressure, and conflict. With the concept of force and conflict, there is also a concept of "Balance-of-power-in-conflict." Yielding or giving-up in a situation of conflict would result from an adverse balance of power and would be associated with the

weaker organism. In psychology the term used is "submission," usually associated with Domination-Submission, or Ascendancy-Submission. While all living organisms are subject to this kind of relationship and behavior, the concept of submitting under coercion or pressure is foreign to and unrelated to a concept of growth. The more difficult concept to imagine or postulate is a positive concept of spontaneous, non-coerced yielding, abandoning, giving-up under circumstances where the change is internally a biologically or psychologically "meaningful" change.

The confronting of differences is not necessarily a conflict of differences. It does not seem necessary nor meaningful to use terms of conflict to describe the process of fertilization. It is not, for example, meaningful to say that the spermatozoon dominates the egg, or vice versa, or that one is ascendant over the other, or submissive to the other, or that there is anything in the behavior of either that can meaningfully be said to represent conflict.

Functional integration of the parts of any living organism necessitates a concept of communication, a two-way communication among the parts, which is implicit also in the concept of confronting of differences and of spontaneous yielding to differences. In psychological relating, submission in conflict is essentially the result of one-way communication. One-way communication represents the hierarchy of authority; one commands, the other obeys. One-way communication is not growth; nothing original emerges from the command-obey relating. Only conformity can result from a successful command. In growth and in two-way communication, there is neither command nor obedience. Creativity is the antithesis of conformity in biological as in psychological growth.

Growth is a process of organization: Implicit in differentiation and integration is a concept of organization. Higher degrees of differentiation require higher degrees of organization. "'Organism,'" said Sinnott, "is a very happy term, for the most significant fact in biology is that protoplasmic systems are organized. . . . Organization is the central fact in the life sciences. . . .

As cell divisions follow one another and the various organs and tissues become differentiated all things move in harmony."⁶⁸

Growth is a positive process: That growth is a positive process is implied in each of the preceding propositions. Growth is differentiating, moving on to more and more complexity; it is integrating and harmonious, not disintegrating nor disharmonious; it is confronting, not conflicting; it represents free interplay of differences, spontaneous abandoning, yielding of present structures and functions. Disintegration, disharmony, conflict, rigidity, inflexibility, unyieldingness, force, coercion, are negative concepts; to the extent that they have meaning for a biological organism, that organism is in a lower state of growth than it would be without such meaning.

Growth is a purposive activity, inseparably involved in a concept of value: This proposition merits more discussion than it can be given here. A "scientist" cannot observe purpose; he can only build a mental construct and infer purpose from behavior which he can perceive. Sinnott has quite convincingly discussed the biology of purpose and its relation to value in biological and psychological behavior.^{65, 66} "Protoplasm has its preferences, and value judgments are their ultimate expression."⁶⁶

PSYCHOLOGICAL GROWTH

Differentiation and integration, the two essential criteria for psychological growth, have been postulated for psychology as well as for physiology and biology.^{40, 58, 68} Each of the other postulates given above for biological growth is equally applicable to psychological growth.

Differentiation, individuation, spontaneity, confronting: In all recorded history, man has struggled with two problems of psychological growth. The first is how to be an individual; how to have ideas of one's own; how to learn from one's own perceptions; how to develop judgment based upon one's own experience; how to think for one's self; how to be original, imaginative, creative, explorative, experimentally minded, resourceful;

how to be one's self; how to be spontaneous in one's behavior; how to have the freedom to act on one's own ideas and on one's own value systems and preferences; how to grow and develop psychologically at one's optimum; and also, within this freedom, how to listen and how to learn from others. In attempting to be original, explorative, experimentally minded, it almost inevitably happens that one's behavior conflicts with the needs and plans of others, and with their values, biases, prejudices, misperceptions, expectations, and demands.

Integration, communication, organization, harmony: The second great problem that man has struggled with is the reconciliation of individual differences in desires, purposes, motives, goals, values, and actions. Individuals are different, but they must exercise these differences in such a way that there shall be the greatest harmony in the behavior of men. Why do we say *must*? It is because spontaneity without harmony becomes domination behavior. Domination incites resistance which will be discussed under "Circular Behavior." The vicious circle of domination-resistance operates to curb one's own spontaneity. Thus, in order to maintain one's own spontaneity one must give consideration to the spontaneities of others and strive to live in harmony.

The reconciliation of spontaneities, the expenditure of energy with others, as contrasted with expending energy against others, the striving for harmony and social integration, is consistent with the Darwinian theory of natural selection. Coker has termed "a mischievous fallacy" the notion that "fittest to survive" and "strongest" are equivalent.²⁰

Man's second problem, that of discovering, developing, inventing, and achieving harmony in human behavior, is thus inseparably linked with the first. If men behaved in a way which would enable each individual to approximate his optimum of spontaneity and self-development, that, by definition, would achieve the greatest good for the greatest number. The greatest good for the greatest number implies the approach in some kind of optimum development, some maximum of individuality for each member of the social group.

Psychologists have long regarded the "Golden Rule" as a principle of ethics, a tenet of religion, a "thing of value," as something for the philosopher, foreign to the interest of the scientist who is concerned with prediction. Have psychologists become so preoccupied with their negative studies of frustration, aggression, disorders, defenses, disintegration, and disease, that they have overlooked the opportunities for scientific prediction from studies of positive, constructive, harmonious, responsible, growth behavior, including the Darwinian principles of Natural Selection and human expressions of the Golden Rule?

Dynamic relating between the person and the environment:
We tend to forget that science is process. To use the term "dynamic" one needs almost to indicate whose use of the term is being employed and the year in which it was used. Is it Freud of 1910, Woodworth of 1920, Murray of 1930, Allport of 1940, Sullivan of 1950, or one of the myriad other users? Or, is it Woodworth of 1920, or Woodworth of 1940, or Allport of 1937, or Allport of 1955?

ume by both European and American writers Elsewhere, others have described the process of dynamic relating between the individual and his environment as it appears to them, e g, Murphy,⁵⁷ Sullivan,⁶⁷ and Frank,³⁴ all regard the individual as inseparable from the environment It is the process of interaction that must be studied and understood, a point of view basic to everything to be said about personality

Psychological growth as a positive, constructive process
There is nothing in the phenomena of differentiation and integration and of the emergence of originals that can be meaningfully described in terms of domination, submission, aggression, frustration, hostility, mastery, rigidity, compensation, conflict, or even sublimation These are negative terms which are used to refer to behavior under interpersonal conflict or under psychological "stress" They designate conditions, relations, and processes that are low in differentiation, low in integration, or in which the growth processes are abnormally retarded

Fromm refers to growth and productiveness as the "primary potentials" of man, and to defense mechanisms and destructiveness as a secondary "potentiality" that comes into manifest existence only in case of abnormal, pathogenic conditions³³ Similar views have been strongly emphasized by Goldstein,³⁸ Sullivan,⁶⁷ Horney,^{41 42} and Murphy⁵⁷

Optimum growth and a propitious environment The criteria for growth are differentiation and integration the maximal realization of the person's individuality, his spontaneity, his creativity It has been mentioned that growth, like everything else a psychologist discusses, exists in degrees Although the units of measurement or of comparison are often crude or even non-existent, growth may be considered to take place at a faster or slower pace or to a greater or lesser extent Theoretically, there are biological and hereditary limits beyond which a given individual cannot grow Practically speaking, however, it is difficult to say when one achieves this highest limit or whether anyone ever achieves it A categorical answer would require that one exhaust all possible combinations of environmental circum-

stances. Psychologists regard psychotherapy as a speeded-up growth process, and say that therapy releases the child for more rapid development of spontaneity and harmony. They have not changed the child's biological inheritance; they have modified the environment and the dynamics of interrelating. They have offered the child a more propitious environment in which to grow psychically in a meaningful way. Man is not only a product of his environment, but also, in a very real sense, a victim of his environment.

CIRCULAR BEHAVIOR

The concept of circular behavior has been used by psychologists mainly as a neurological construct to explain self-stimulation, or feed-back phenomena. Follett is the first, to this writer's knowledge, to have extended the concept of circular behavior as a psychological concept to the interaction of human beings.³³

Socially integrative behavior—the growth circle: Socially integrative behavior expresses high degrees of the three qualities of growth: spontaneity and harmony, differentiation and integration, self-expression and the expenditure of energy with others in a common purpose. Through the confronting of differences and the free interplay of differences shown in open-minded discussion, Follett observed the solutions to problems which she, as a mediator of labor disputes, thought could not have been devised without the participation of all parties in the dispute. Problem solving in social conflict, for Follett, was not a psychology of adjustment, but a psychology of invention. Her volume, *Creative Experience*, was the outcome of a circular process in interacting, of the interweaving of experiences, the working together. The emergence of originals represented an integration of differences. The free interaction of minds in disagreement was creative. It was not a sequence of stimulus-response behaviors, but a process; the response was not just to a stimulus, but a response to a relating. Circular behavior was creative, inventive;

it was a growth circle. This appears to be the essence of a dynamic psychology. This is circular behavior in the direction of growth. The hypothesis of the growth circle is: Socially integrative behavior in one person tends to induce socially integrative behavior in others.

Domination--the vicious circle: Follett found another kind of circular behavior in persons who could not integrate their activities in a creative direction. This behavior was domination, the use of power over others instead of, as in integration, the use of power with others. The hypothesis of the vicious circle is: Domination in one person tends to incite domination (resistance) in others.

Cutting the vicious circle: The growth circle relationship, the use of socially integrative behavior in the family, school, industry, or anywhere, is a means of "cutting the vicious circle." The use of rapport in the clinical situation⁴ and of psychotherapy, which is basically a socially integrative relationship, are means of cutting the vicious circle. Consistent with the emphasis given by psychologists to negative concepts and to things that are disturbing, there are many more references in the psychological literature to the vicious circle than to the growth circle.

RESEARCH ON THE DYNAMICS OF RELATING

A number of research studies on the dynamics of relating report findings relevant to circular behavior. In 1935, the writer began a program of research to test hypotheses regarding the interactions of preschool children. The first study was designed to determine whether dominative and socially integrative behavior, as such, could be reliably observed and recorded in the form of quantitative data.^{5,6} The data were recorded items of actual behavior of preschool children in a free play situation in an experimental playroom. Two of the groups of children lived in an orphanage where a research experimental nursery school

had been established. Half of the children attended nursery school and constituted a nursery school group. The other half, individually matched with the others, did not attend nursery school and constituted a control group of non-nursery school children. The orphanage children were below average in intelligence and came from generally low socio-economic levels. Many were illegitimate.

Analysis of the data revealed high internal consistency and supported the hypotheses that (a) domination incites domination, (b) integrative behavior in one child induces integrative behavior in his companion, and that (c) domination and integration are psychologically different; in this experimental situation they were dynamically unrelated. Two years later a similar study with kindergarten children of superior intelligence coming from high socio-economic backgrounds again yielded consistent evidence for the hypotheses of the growth circle and the vicious circle of dynamic relating.⁷

The hypotheses and predictive value of domination and of socially integrative behavior have been shown to operate in the actual behavior of young children representing wide ranges of intelligence, biological inheritance, and socio-economic origins. In a sequence of observational studies kindergarten teachers used twice as many dominative contacts as integrative contacts with individual children. Teachers also revealed a wide range of frequencies of contacts with individual children, showing that the children lived in different psychological environments in the school. H. M. Brewer and Anderson found that the kindergarten teachers were meeting aggression with aggression and were systematically inciting resistance instead of cutting the vicious circle.²²

J. E. Brewer made records of the behavior of teachers and children in two second grade rooms in the same school building.²³ One teacher was found to be consistently more integrative (democratic) and less dominative; the other was consistently more dominative (dictatorial, authoritarian). The differences were large and statistically significant. Children with the more integrative

teacher showed significantly higher frequencies of behavior in categories representing spontaneity, initiative, and social contributions to others. The data were consistent with the hypothesis that *integration in the teacher induces integrative behavior in the child*. Children with the more dominating teacher showed significantly higher frequencies of non-conforming behavior, directly supporting the hypothesis that *domination incites resistance*. The behavior of the children also supported the further hypothesis that severe domination does not produce resistance, but submission and atrophy.

Reed observed Brewer's two rooms of children one year later in the third grade with new teachers, and the same two second grade teachers one year later with new groups of children.⁶² She found virtually the same differences between the second grade teachers which Brewer had reported, and practically the same differences in the behavior of the new rooms of second grade children. There was a trend of fairly high correlations in the behavior of each second grade teacher from year to year. However, there was a practically zero relationship between the behavior of the children in the second grade and that of the same children one year later with different teachers in the third grade. Thus, while teacher personalities were relatively constant, there was much more flexibility and responsiveness in the children. Reed presented other data to show the existence of the vicious circle; the integrative teacher was cutting it, the dominating teacher was not.

Anderson and J. E. Brewer made consecutive studies from fall to winter in two third grades.⁶⁴ In group contacts there was no evidence that after five months either teacher was reducing conflict in the room by "cutting the vicious circle" of domination. The report for teachers' contacts with individual children was different: one teacher was cutting the vicious circle; the other teacher was not. Another type of approach to group behavior, bearing on this problem, is found in the series of studies on induced "social climates" reported by Lewin and Lippitt,⁶⁵ and summarized by Lippitt and White.⁶⁶

The "democratic climate" is the productive relation of socially integrative behavior which in the group is circular and self-renewing. There is mutual acceptance and a working with each other, "working together for common goals." In the "laissez-faire" climate there is a considerable amount of domination, interpreted as a considerable source of "group disruption," a "vicious circle of frustration-aggression-frustration. . . ." ⁵¹

Circular behavior is found in other studies based on attitudes, symbolism, fantasy, and ratings of behavior reviewed by Anderson and Anderson.¹² The frustration-aggression hypothesis of Dollard, Doob, Miller, Mowrer, and Sears and their collaborators is an explicit statement of the vicious circle of behavior, and is so termed by them.³² Mowrer and Kluckhohn have since used the concept of domination inciting domination and have called it a vicious circle even when the response represents a displacement on a succeeding generation.⁵⁶ Jackson and Todd, writing on child treatment and the therapy of play, spoke of the "vicious circle" and the "virtuous circle."⁴⁴ Newcomb used the concept of the vicious circle under the heading "Toward the Reduction of Hostility," maintaining that such circular processes are not necessarily irreversible.⁵⁹ Bowlby has applied the principle of circular behavior to family interaction in psychiatric and analytic child guidance.^{20, 21} The concept of circular behavior has been extended by Bion¹⁰ and Jaques⁴⁶ to interaction in group relations and to group psychotherapy in industry. Fromm suggested the terms "vicious circle" and "virtuous circle" as applicable to his concepts of unproductivity and productivity.³⁵ Frank, emphasizing the unity in biology and psychology, discussed in lucid fashion the need for a "conception of *trans-actions* which are dynamic circular processes occurring in a field."³⁴

LEVELS OF DYNAMIC RELATING

I have cited research which has consistently presented two kinds of circular experience. Moreover, there is general agree-

ment in value judgments which have been placed on these two processes of relating: one is a growth circle, called also a virtuous circle; the other is a vicious circle. The very presence of the value judgments places the virtuous circle as a sort of ideal toward which man can aspire but which many persons fail to attain.

There are other distinguishable patterns or processes of human relating. It is postulated here that all human relating can be arranged on a continuum of degrees or intensities of environmental domination. We shall discuss six levels of human relating. The number of levels could be increased or diminished. The amount or quality of human interaction decreases as environmental domination increases.

The first level of human relating is called *socially integrative behavior*. At this level domination is negligible or imperceptible. The environment accepts the individual "as he is." This is the ideal relationship, the hypothetical propitious environment for optimum growth. There is no perfect harmony in human relations. Perfect harmony would require perfect understanding of the desires and purposes of others, as well as of one's self. At the highest stage of harmony in human relations each person causes some inconvenience to those about him; each person finds his own spontaneity somewhat restricted by the well-meaning behavior of others. Each takes a considerable amount of such inconvenience (degradation of his energy) for granted. He continues to like his friends; he continues to enjoy their associations; he bears no hostility for the minor inconveniences. He continues to show high spontaneity in his own behavior and to accept a high degree of spontaneity in theirs. In this relationship it is meaningless to speak of conflict, aggression, attack, hostility, fear, or defense mechanisms.

An empirical distinction has been made between two degrees of relating in *socially integrative behavior*,^{9, 12, 14, 22, 23} but the distinction between these two levels will not be elaborated on here.

Examples of socially integrative behavior are found in studies

of democratic relations in the home, responsibility, rapport, altruism, leadership, sympathy, empathy, need for affection, cooperation, and friendliness. In the writer's studies, preschool and kindergarten children have consistently shown higher frequencies of socially integrative behavior than domination in free play activity; teachers, on the contrary, with rare exceptions, have shown consistently higher frequencies of domination in their schoolroom contacts with children.²⁹

One tends to *resist environmental press or domination* when it increases to the extent that it actively interferes with the attainment of one's goals and purposes. Because of the defensive nature of the relating, the spontaneity and the action are at a lower level than is usually found in social integrative behavior. In part because resistant behavior is high in action, but more probably because of its nuisance value to other persons, it is more easily observed, more reliably recorded, and therefore more easily and more frequently studied by psychologists. Examples of behavior at this level of relating are found in studies of frustration, aggression, hostility, negativism, mastery, anger, ascendance, dominance, and delinquency.

When domination increases still further it reaches a theoretical relationship in which the strength of the domination equals the ability of the person to resist. Balance of power, whether used as a concept in understanding personality or in interpreting international diplomacy, has meaning only in relations of conflict in which energy is being expended against others. Balance of power is meaningless in relations where either persons or nations are working with each other through socially integrative behavior. In relations of conflict a person's perceptions tend to become noticeably distorted, and his relations with the environment are ambiguous. Some behavior at the *level of ambiguity* is regarded as neurotic and is scarcely distinguishable from submission. In the behavior of mice and men it may be, as Maier has said, "behavior without a goal."³²

A still lower level of personality growth is found in relations of *submission to environmental press*, often shown in conformity and obedience. In submission there is low spontaneity and low

communication "Psychoneurosis" is generally found at all levels of interpersonal conflict. Much psychoneurotic behavior is found under extreme environmental domination. In therapy such patients, with increasing insight and with clarified perceptions, usually move up the scale through these levels of relating before they achieve a socially integrative relationship.

A person who has retreated from reality into one of the several classifications of psychosis is an example of *severe degradation of energy*. He shows so little confronting, so little spontaneity, that he is even said to be "out of contact" with reality. There is often no discernible communication. This is the behavior that is found in cases of pathological fears, in persons who have lived in a tremendously oppressive environment. Here are persons whose perceptions, if communicated at all, are grossly distorted, even delusional.

Luthe has summarized the contributions of Selye in studying the reactions of the organism to physiological stress. Behavior at the first four levels of interpersonal conflict here discussed, represents the reactions of the human organism to psychological stress, to man made and man-controlled domination.

At the point of 100% human environmental domination psychological rejection is complete, the environment of human beings refuses to permit the individual to continue living as a person. Murder, capital punishment, and abortion are examples of 100% environmental domination.

Circular behavior, where "like produces like," is found only at the Socially Integrative Level and the Level of Resistance to Domination. Circular behavior presumes relatively high degrees of spontaneity and perception, it is not found at the Level of Ambiguity or below this level.

PSYCHOLOGICAL ENTROPY THE DEGRADATION OF ENERGY

In the past, psychologists, in their development of scientific method, have drawn heavily upon the physical sciences. There has been an attempt to extend the multi-discipline approach in

the study of man to a closer integration of the physical and biological sciences. Attempt has been made, for example, to discover the similarities and differences between communication theory in physics and communication theory in physiology, neurology, and psychology.

Psychologists have studied aggression and anxiety as more or less specific isolated phenomena. There is a need for a common denominator or for conceptual units by which to relate and compare the findings of the myriad negative and positive approaches to the study of personality. The concept of psychological entropy seems to provide such a common denominator. Degradation of energy is conspicuous in all studies at the levels of interpersonal conflict.

Physical matter—the closed system: The first law of thermodynamics concerns the conservation of energy or the constancy of energy in a closed system. The second law of thermodynamics concerns a quantity of energy which, while remaining constant in a closed system, tends to decrease in quality and never to increase. While it appears that no exceptions to the second law have been found, physicists have been unable to adapt it consistently to living matter. The closed system, in which the law is supposed to operate, is a theoretical machine that has no conductivity of heat or communication with the outside. No material enters or leaves it. It operates without friction and without regard to time, and the process within it is reversible. Within this closed system there is no loss of energy, but the free energy changes in quality, ultimately reaching equilibrium, a state of randomly distributed molecules in which there is no organization. This loss in quality of energy is called entropy, a negative concept, referring to that process in nature wherein energy of high quality is degraded to energy of a lower quality. *Entropy is the degradation of energy.*

It should be noted that physicists do not have a positive concept nor a word in the English language to refer to the positive process of achieving higher levels of organization of energy or the "enhancement" of the quality of energy. Physicists (for ex-

ample, Wiener⁷²) struggling with their own concepts and attempting to relate the problems of communication and organization in physics and biology, have referred to the positive process as the "negative of entropy." Brillouin has proposed the shortening of the double negative to "negentropy," to express the positive concept of a change to a higher quality of energy.^{21 23}

Life—the open system While both laws of thermodynamics apply only to closed systems, man is an open system and life is an irreversible process. Materials from the outside enter and leave a living organism, there is contact and communication with the outside. Some of the questions as to whether or to what extent man behaves according to, beside, or beyond the laws of thermodynamics have been discussed by White,⁶⁹ von Bertalanffy,¹⁸ Wiener,⁷² Brillouin,^{21 23} Raymond,⁶¹ Krecz,^{47 48} Frank,³⁴ Ransom,⁶⁰ Anderson,^{10 12} and Miller.⁶⁵

If life is an open system, with energy and stimulation flowing both ways, and communication occurring in two directions, then the most open system, the greatest freedom, the greatest flow of ideas out and in, the maximum of communication with the environment is found in socially integrative relating, in a situation or a relationship in which environmental domination, the degradation of psychological energy, is at a minimum. The maximum of personality development, the optimum, the ideal the "healthy" relationship from the standpoint of psychological growth, would also be found here. This would be the theoretical optimum environment, the theoretical optimum realization of hereditary personality potentials.

Is socialization the degradation of energy? Or how much of socialization is a degradation of energy? This has been well discussed by Harding.²⁹ We can merely raise the question here. From the point of view of personality growth, the aim of socialization is to achieve for the child the socially integrative relationship, that is, the maximum of spontaneity with the maximum of freedom. Obviously, much of the actual socializing process is a throttling of the child's spontaneity and a stifling of his freedom. It is not at all clear that the degree of throttling and stifling is

necessary for the degree of harmony achieved. Are we confusing harmony with conformity? Harmony is a creative use of energy, the interrelating of spontaneities. Conformity is the degradation of energy, the uncreative stifling of spontaneity. However justified conformity may be in a given situation, it is not harmony, it is not creative, and it is not growth. Murray and Kluckhohn, writing about the socializing process, stated that an organism can be "over-socialized."⁵⁸

Partial answers to our questions are also found in an excellent summary of both psychological theory and contemporary research on the process of socialization by Child. He used the term socialization as a "broad term for the whole process by which an individual, born with behavioral potentialities of enormously wide range, is led to develop actual behavior which is confined within a much narrower range—the range of what is customary and acceptable for him according to the standards of his group."⁶⁶ Whiting and Child have analyzed anthropological data on child rearing practices in primitive societies and have related socialization procedures to personality theory.^{70, 71}

Any socializing process which tends to level productive energies toward the mean instead of releasing creative energies in the direction of maximum or optimum realization of the individual's potentials is degrading human energy and producing both an individual and a social loss. The measure of this individual and social loss is one of our immediate research problems.

Value in relating: A given point on the vertical dimension of the "Open System," generally, represents a moment in time, a cross-section of the process of interacting. It is possible with the successive changes in relationships, with additional communication or failure of communication, for an individual to move up or down, or to remain indefinitely at one level of relationship. There is always direction; not direction of motion, but direction of value in relating, the value to the changing individual which the moment of relating holds for him. This often represents the direction toward or away from the optimum of self-realization, the optimum growth of the individual. The direction of value in

relating is the psychological analogue of negative entropy. Psychological negative entropy is growth, social development, creative experience, the realization of the individual's biological personality potentials.

Although from moment to moment there may be movement in either direction, "Life: the Open System" is still an "irreversible process," and "time is of the essence." It is not possible for a biological organism to relive any moment in time. The borderline between the "Open System" and the "Closed System" has so far been crossed by man in only one direction. Movement at this point is irreversible.

Theory of probability, "scientific" prediction, and organization: The mathematical basis for the concept of entropy is not different from the mathematics of the theory of probability. Entropy, according to Brillouin, "acquires a precise mathematical definition as the logarithm of probability."²⁴ As entropy increases and energy approaches "equilibrium," probability also increases, as entropy decreases, probability decreases. Negative entropy, or the enhancement of energy, is today synonymous with the increase of information and the increase of organization in electronic computers, as well as in the higher levels of growth in living organisms.

Socially integrative behavior, the working with others, represents a high state of organization. Conflict, on the other hand, the working against others, represents action toward disorganization. Emotional behavior in conflict, such as in fear and anger, is even defined by some psychologists as disorganized behavior. Generally the degree of organization is highest at the top, it is lower, in conflict, at the middle portion of the scale; and it is lowest at the bottom in states of atrophy, disease, and disorganization. Wiener relates "amount of information" not only to a negative concept of entropy, but to a concept of organization.⁷²

If it is true, as it appears to be, that the lowest predictability in statistical mechanics, biology, and psychology is to be found at the highest levels of organization, then the most difficult prob-

lems of prediction lie ahead of those psychologists who would study the positive aspects of human behavior, personality development. This mathematical and methodological difficulty has already been noted in a number of researches.¹² The continuum in the theory of probability extends from the virtual "dead certainty" at the state of relatively complete degradation of matter, equilibrium, at the one extreme, to the relatively improbable prediction of the emergence of an original at the highest theoretical integration or organization of matter, at infinity (one chance in infinity), in the "Open System." Learning at the higher levels thus becomes the emergence of an original, and personality development is a psychology of invention.

Psychological entropy, culture, and personality: The concept of psychological entropy as a degradation of energy, with negative entropy as the release of psychological power or energy, is a concept of broad application. It represents a functional interplay between a human environment and a human being. It holds for infants and for persons of all ages. It would seem to be a test of a propitious environment that could be applied to all cultures. Moreover, it seems amenable to measurement in quantifiable units and to prediction in statistical probabilities. The amount of psychological entropy for an individual in a given situation can be a test, e.g., of "goodness" of parent-child relations or of a school environment. As a test of culture it can be a "common denominator" or a "standard score" by means of which the effects on personality of diverse cultures may be compared.

Beginnings in this direction have been made by Whiting and Child with their evaluation of the severity of socialization,⁷⁰ by Whiting, *et al.*,⁷¹ by Child and Waterhouse in their reinterpretation of regression,^{27, 28, 68} and in the study by Barker, Dembo and Lewin, as a lowering of the quality of performance.¹⁷ Mead and Wolfenstein have assembled a number of studies in which they make cross-cultural comparisons of childhood in contemporary cultures.¹³

Other cross-national research studies are in progress. The Organization for Comparative Social Research, an international

team of collaborators from seven countries of Western Europe, has undertaken two cross national research projects, a study of teachers' attitudes and a study of adolescents' reactions to threat and rejection. Jacobson and Schachter have edited a series of reports on methods and research design for the study of teachers' attitudes.⁴⁵ Schachter, Nuttin, de Monchaux, *et al* have given a preliminary report of the work with adolescent boys in seven nations.⁶⁴ Cultural factors in personality and attitudes of adolescents toward technological change are being studied by a five nation research group in the Near East under the leadership of Hudson.⁴⁸ Gillespie and Allport have reported a cross-national study of attitudes of college students in ten countries.²⁷

To test the hypotheses about levels of human interrelating against cultural differences, a cross national research program has been organized to study children's judgment of the process and outcome of social conflict. The data have been gathered by local research teams and the writer from children in five countries of Western Europe, Mexico and the United States. Preliminary analyses of data and reports have been made by Anderson and Anderson,^{11 13} Métraux,⁵⁴ Geierhaas,³⁰ Heber,⁴⁰ and Robinson.⁶³

SUMMARY

In this chapter I have discussed the concept of growth from the standpoint of biology and of psychology. Growth is at once a process of differentiation and integration. Within these two aspects, which are not found separate in nature, a number of other postulates about growth were made.

Two kinds of circular behavior were discussed: (a) socially integrative behavior, called the growth circle, where interpersonal conflict is meaningless, and (b) domination resistance, called the vicious circle, where interpersonal conflict has become meaningful. The introduction of socially integrative behavior by one party to a conflict is a means of cutting the vicious circle. Research bearing on circular behavior was reviewed.

Six levels of dynamic human relating on a scale of increasing environmental domination were discussed. Psychological entropy, the degradation of energy, was proposed as a common denominator or a unifying concept for a synthesis of the multitude of research studies which represent a negative approach to the understanding of personality. Similarities and differences in the application of the concept of entropy to the Closed System of the second law of thermodynamics and to Life, the Open System, were reviewed. Entropy in statistical mechanics is defined as the logarithm of probability, that is, the prediction that matter will ultimately reach a stable state of random distribution of molecules in disorganization. Personality growth, being a process of organization, requires a concept of negative entropy, and, for the emergence of originals, a theory of improbability with the ultimate prediction one chance in infinity: creativity.

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IA

**Perspectives
in Psychoanalytic
Theory***

FREUD'S IDEAS in the sphere of personality aroused a clamor of protest that has never entirely subsided. After the initial shock ensuing from his discoveries had been overcome, scrutinies of the system appeared to be more concerned with formal methodological characteristics than with content matter. Much has been written about the alleged subjectivism or animism of psychoanalysis, its supposed confusion of hypotheses and facts, and the nonverifiability of its hypotheses. I shall try to review some of these charges in this chapter, while reconsidering such concepts as conscious and unconscious, instincts, and motivational dynamics. Finally, I shall discuss the relationships among psychoanalysis, traditional psychology, and developing trends in personality theory, emphasizing the need for integration on all levels of scientific research.

* This is a somewhat expanded version of the writer's paper "Meaning of Psychoanalytic Concepts and Confirmation of Psychoanalytic Theories," *Scientific Monthly*, No. 5, 79, 1954. Most of the views expressed therein are discussed in greater detail in the monograph on "Psychoanalysis and the Unity of Science," *Proceedings of the American Academy of Arts & Sciences*, No. 4, 80, 1954.

PSYCHOANALYSIS AND PHILOSOPHY OF SCIENCE

Many of the objections against psychoanalysis have their origin in an overly narrow interpretation of scientific empiricism or operationism, stemming perhaps from a vaguely antitheoretical attitude. Since the physical sciences are usually considered the ideal model of scientific theory construction and operational procedure, certain fundamental changes in the conception of theoretical structure that have taken place in the field of physics itself must be taken into consideration. Frank notes that the earlier ultrapositivistic requirement, according to which all principles of physics should be formulated by using only observable qualities, has been broadened to include indirection.⁹ Einstein speaks of "the ever-widening logical gap" between observation and basic concepts or laws.⁵ According to Hempel, it is precisely the "fictitious concepts rather than those fully definable by observables" that enable science to proceed to explanation and prediction.²⁰

A comparison between the situation in physics and in psychoanalysis is certainly not justified in all respects. However, modern physics and psychoanalysis have in common a turning away from the "natural" to a "fictitious" language. The common result of this policy is that a wider and simpler network of interrelationships among observable data will . . .

the result of cultural and parental commands and taboos, the super-ego

In Europe the most important function of logical positivism was to stress the necessity of relating existing theories to empirical data. In this country, and particularly in the social sciences, its major function seems to be the advocacy of, and a tolerance for, theory *per se*.

Some critics of psychoanalysis concerned with the definition of basic concepts, have objected to what they consider Freud's alleged lack of sophistication in philosophy of science and his tendency to "reify" concepts. Freud, however, in contrast to some of his followers, was keenly aware of logical and epistemological problems. Definitions in science, he maintains, "are in the nature of conventions. Although everything depends on their being chosen in no arbitrary manner, but determined by the important relations they have to the empirical material-relations that we seem to divine before we can clearly recognize and demonstrate them. . . Progressively we must modify these concepts so that they become widely applicable and at the same time consistent logically. Then, indeed, it may be time to immure them in definitions. The science of physics furnishes an excellent illustration of the way in which even those 'basic concepts' that are firmly established in the form of definitions are constantly being altered in their content."¹⁵

THE CONCEPT OF THE UNCONSCIOUS

Most clinical descriptions found in Freud employ the inferential construct of the "unconscious." Freud considers the assumption of unconsciousness as necessary because the data of consciousness are "exceedingly defective."¹⁶ Conscious acts alone do not enable us to account for certain aspects of slips of tongue and other parapraxes, dreams, mental symptoms or obsessions in the sick let alone the sudden inspirations of healthy persons. In

carrying us, as Freud says, "beyond the limitations of direct experience," the assumption of unconscious acts makes the disconnected and unintelligible conscious acts fall into a demonstrable connection.

From the standpoint of the logic of science, unconscious tendencies are a special case of latent or "dispositional" characteristics. They are comparable to such physical characteristics as magnetism, provided that we do not insist on assigning them to the "mind" in a metaphysical sense. Such composite terms as "unconscious hostility" or "dependency" describe a disposition to display aggression or dependence under specified conditions, as, for example, in therapy. In his definition of behavior Carnap has expressly included "dispositions to behavior which may not be manifest in a given special case."³ We therefore must agree with Freud that it is the very assumption of unconscious processes that enables psychoanalysis to take its place as "a natural science like any other."¹⁷ He goes on to explain that these processes are "in themselves just as unknowable as those dealt with by other sciences such as physics and chemistry." And he remains in the spirit of the natural sciences when he stresses that "It is possible to establish the laws which those processes obey and to follow over long and unbroken stretches their mutual relation and interdependences."

The concepts of conscious and unconscious signify particular "systems with certain dynamic characteristics, requiring a specification of their relationships within the over-all formal model." When dreams or subsequent free associations are used, this is done for the establishment of intermediate links that can be inserted in the gap between the two systems and which help to recover the latent material in a process of interpretation. Obviously to avoid confusion concerning mentalistic reification, Freud suggests "employing for the recognized mental systems certain arbitrarily chosen names." Since he cannot ignore consciousness as the common point of departure, he proposes to use the abbreviation Cs (for consciousness) and Ucs (for the un-

conscious) when the two words are used in a systematic sense.

Only in Freud's later writings does the term "unconscious" take on a distinct reference to mental qualities. One of the chief reasons for this shift was the empirical realization that not only the id but also the super-ego is in part unconscious. In effect, this merely underscores the increasing emphasis on the system-character of Freud's basic concepts and the decreasing emphasis on the more introspectionistic distinction between conscious and unconscious.

Freud readily acknowledges that a "rough correlation of . . . the mental apparatus to anatomy . . . exists." If, so far, every attempt to establish a localization of his constructs has miscarried, the present imperfect state of the biological sciences must be held responsible. Bernfeld has amply pointed out the influence on Freud of Helmholtz' physicalism and the principle of energy conservation.¹ It must be stressed, however, that while at the beginning Freud was intensely dominated by neurophysiological thinking, decisive progress in psychoanalysis did not occur until after he freed himself from the search for such analogies and turned to more openly psychological models.

In defending the complexities of his approach, Freud emphasizes that there is no obligation to achieve, at the very first attempt, a theory that "commends itself by its simplicity, in which all is plain sailing." Freud argues that we must defend complexities of theory so long as they fit the results of observation. Yet we must not abandon the expectation of being guided by those very complexities to the recognition of "a state of affairs that is at once simple in itself and at the same time answers to all the complications of reality."¹⁶ If there is a similarity of tone with logical empiricism, we must not forget the fascination that psychoanalysis has had for many of the logical empiricists. They saw the genius of Freud at a time when most psychologists and psychiatrists were still deeply resistant.

THE CONCEPT OF INSTINCT

Next to the concept of the unconscious, that of "instinct" has been objected to most vigorously, in the face of claims by psychoanalysis for consideration as a science. The psychoanalytic concept of instinct is complicated by the assumption of far-reaching transformations and disguises, particularly the sex instinct. In reality, some part of Freud's instinct theory, such as infantile sexuality and psychosexual stages of development, belong to the most lucid and powerfully executed portions of the psychoanalytic system. As in the case of the unconscious, Freud pursues an essentially operational course in defining the instincts. He does so by pointing to the capacity of the instincts to "act vicariously for one another" and readily change their objects. The mechanisms of repression, reversal into the opposite, or sublimation, are some of the more striking examples of this variability. It may well be argued that the explanatory value of the concept lies precisely in this emphasis on variability. Only in the case of an assumed one-to-one correspondence between instinct and manifest behavior would the concept of instinct become circular or superfluous as an unnecessary duplication of behavior. Rather, it is a truly explanatory, inferential construct imbued with some degree of independence. Freud avoided unnecessary duplication by fully considering the functional ambiguities inherent in the relationships between drives and behavior, instead of directly projecting behavioral trends back into the subjects.

The mixture of pioneering gusto and understanding for ultimate logical requirements, so characteristic of Freud, is revealed when he speaks of the "superb indefiniteness" of the concept of instinct. He goes on to claim for instincts "the same value as approximations, as belong to the corresponding intellectual scaffolding found in other natural sciences." We must expect them to "remain for a considerable time no less indeterminate than those of the older sciences (force, mass, attraction, etc.)."¹⁷ Freud ascribes some of the difficulties in his speculations

about instincts—speculations that he likes to call his “mythology”—to being obligated to operate with “metaphorical expressions peculiar to psychology.” It must be added, however, that for the type of problems with which psychoanalysis deals, the mentalistic introspectionist or animistic vocabulary constitutes the precise counterpart to what Frank calls the “pictural” vocabulary.⁹ This vocabulary, in turn, is recognized in physics as a legitimate or at least tolerable ingredient of the earlier stages of concept formation. Whereas the analogical procedure may not be suited for purposes of ultimately proving a scientific hypothesis, it may well be argued that the function of mentalistic analogies is more important in psychology than it is in physics.

MOTIVATIONAL DYNAMICS

One of the most bewildering aspects of psychoanalytic theory is the turning away from the obvious face-value picture of personality, as it is derived from introspection or from direct “phenotypical” observation of external behavior segments. An example is the reinterpretation of overt friendliness as a sign of underlying hostility, or of extreme tidiness as a sign of preoccupation with dirt. The discrepancy disappears with the specification of a set of fixed or variable operational conditions that determine when overt behavior is to be interpreted as “genuine” and when it manifests some heterogeneous latent factor.

Since scientific inference concerning “central” processes—that is, the assumption of internal states on the basis of external evidence—cannot be defended unless based on a wide variety of circumstantial evidence,¹¹ central inference can be said to have legitimately begun with psychoanalysis. In its beginnings, psychoanalysis comparatively de-emphasized surface manifestations in their specific identity, as well as the so-called “distal” achievements of behavior. These latter results of behavior play the dominant role in Darwin’s thinking and in such neo-behaviorist systems as that of Tolman.²¹ The regrouping of man fest

observable facts, as undertaken by Freud, centers about sameness of "need," that is, sameness of assumed internal cause of dynamism. In the case of Tolman it centers about sameness of effect. In Brunswik's theory of perceptual thing-constancy it centers about sameness of external object.²

By virtue of this inherent incompleteness, psychoanalysis did not altogether avoid the pitfalls of motivational relativism and genetic dissolution of overt adjustmental values. This one-sidedness has been remedied to a certain extent in the more recent shift from an almost exclusive emphasis on the id and motivation to an increased concern with the ego, that is, with reality-oriented behavior and adjustment in general. Even so, psychoanalytic expansion in this direction has been more programmatic than real, and there are a number of problems that can be solved only by an explicit integration with psychology proper and with sociology. The conceptual tools of psychoanalysis are just not sufficient to fully explain rational and social behavior.¹¹ If we were to deny this we would only obscure the essential theoretical contribution of Freud, his discovery of motivational dynamics.

and unmasked and "discredited" as to their explanatory value, the subjective experiences of motivation. The phenotypical "manifest" characteristics provide only indirect cues for inferences concerning the "latent" genotypical forces of motivation. It is of comparatively lesser significance that in the majority of cases it is verbal behavior, such as dreams, free associations, and the like, rather than overt motor behavior proper, that psychoanalysis takes as the manifest basis for drive interpretations. This does not mean, however, that psychoanalysis is "introspectionistic." It is precisely through psychoanalysis that we have learned to doubt the face value of introspection.

It must be further noted that the assumption of the dynamisms of the "inner man," to which such behaviorist critics of psychoanalysis as Skinner have objected,²⁰ can be shown to increase the parsimony of the scientific description of behavior patterns. A translation of psychoanalytic concepts into the terminology of the classical behaviorist's "stimulus-response" approach, useful as it may be in certain contexts, has its difficulties and limitations. As we have seen, the major emphasis of psychoanalysis is on the discovery of internal causes. These include, in the language of psychoanalysis, "subjective phantasies" and generally also the differential meanings an external event may acquire for various individuals. Freud began to make progress in his understanding of hysteria only after he had given up the idea of a simple external causation. He observed that only after the hypothetical factor of hysterical phantasies had been introduced did the structure of the neurosis and its relationship to the patient "become conspicuous." Since the relationship of these phantasies to external factors is most complex and ambiguous, it seems heuristically fruitful to assume the internal mechanisms postulated by psychoanalysis, leaving their full operational specification for a later time. Contrary to Skinner, I believe that such assumptions do not carry outside the "bounds of natural science." But I do agree with Skinner on the point that any "looking inside the organism for an explanation of behavior" can easily lead to neglect of some of the environmental factors.

and I readily acknowledge that this has been the case with psychoanalysis.

Even more crucial is the fact that hypothetical extrapolations from overt behavior help to select the most relevant, though often less conspicuous, aspects of behavior which otherwise would be lost in the practically infinite range of possible observation. The relatively great explanatory and predictive value of hypotheses dealing with underlying motivation can be demonstrated statistically by means of multiple correlation.¹² Selectivity doubtless enters crucially into the formation of these hypotheses. We may add that, from the standpoint of logical analysis, there is no alternative but to be behavioristic in any psychological endeavor. Neither the so-called "subjective phantasies" in which psychoanalysis is interested, nor "introspective" events of any kind in others, can be constituted except by inference from the manifest physical observation of organisms.

PSYCHOANALYSIS AND PERSONALITY THEORY

Though it remains true that the variety of isolated behavioral manifestations is too diverse for scientific penetration, integration in terms of unorganized, instinctual dynamics alone is too universal. In all, the break between overt behavior and underlying dynamics was seen in too radical a manner in psychoanalysis. In a 1940 paper, published as part of a symposium on psychoanalysis by analyzed psychologists, I noted that psychoanalysis neglected surface manifestations.¹¹ Although Allport's concept of "functional autonomy" was very fruitful in that context, I was not in agreement with his position that needs are abstractions having little scientific value and obscuring the overt adjustmental difference, as, for example, that between a monk and sexual masochist. Instead, I held that insight into the common element of such diverse social manifestations is extremely valuable from a scientific point of view. Still, it

remains true that the diagnosing of a more broadly conceived dynamic entity underlying, say, the two masochistic manifestations mentioned, was more important to psychoanalysis than the further differentiation of this hypothetical depth factor in social terms. At the same time, however, we must try to identify both those aspects of behavior predictable on the basis of motivation ratings or a psychoanalytic appraisal of the underlying instinctual structure, and those that cannot be predicted on such a basis. Since results suggest that the same underlying motivation may lead to a wide range of behavior, the further specification must hinge on other than "dynamic" factors. Among these further factors determining whether, say, underlying aggression is worked out in a socially constructive form or in neurotic symptoms, extraneous elements, such as social and economic or occupational conditions, will probably play a major role. As I said at that time, "While psychoanalysis has been asking, 'Which drive?,' and general psychology has been asking, 'Which effect?,' a unified psychology must ask, 'Which effect out of which drive?'"¹¹

Problems of cognition also arose in the same context and I observed that certain cognitive abilities are largely independent of instincts. We must assume not only that basic drives determine the fate of abilities, but also that abilities, that is, the organizing modes of coping with reality, determine the fate of drives. I tried to make a plea for a concerted consideration of the depth-surface relations, in contradistinction to depth *per se*, or surface *per se*. In this way awareness about adjustment and reality-oriented behavior, as studied in academic psychology, would be thoroughly integrated with the depth-oriented knowledge of psychoanalysis. Examples for the mutual dependence and independence of motivation and cognition were cited from my studies with the Thematic Apperception Test, stories dealing with relationships between formal cognitive aspects, such as originality or stereotypy, and with dynamic aspects, such as aggression or stages of psychosexual development. The runifer personality . . . conscious social attitudes and ordinary

modes of perceiving and thinking, is of considerable importance in its own right. It should also be emphasized that socially constructive activities, such as role-taking or group cooperation, cannot be described in terms of psychoanalytic "defense mechanisms" alone.

My 1940 paper, now sixteen years old, was mentioned for several reasons: first, because it is probably typical of the stand taken by psychologists who have studied and were impressed by psychoanalysis, but who at the same time tended to give much weight to the problems of academic psychology; secondly, because psychoanalysis has itself tended to move in the very direction just indicated. Hartmann, who also had close contact with psychology in Vienna, was the first, within psychoanalysis, to stress implicitly the partial independence from the instinctual processes of such externally adjustive processes as perception, learning, and thinking.¹⁹ Here psychoanalysis joins the direction of academic psychology. Both psychoanalysis and clinical psychology have become concerned with recapturing the reality temporarily lost in both disciplines. The recent rediscovery of adaptation and consciousness in particular and of manifest data in general within psychological theory proper imply an increasing emphasis on the diagnosis of the ways of the cognitive and perceptual mastery of reality.

Yet in spite of their alleged theoretical reorientation, psychoanalysts have made few actual contributions to the understanding of problems of perception or cognition. In early experimental psychology perception and apperception were approached with a view to universal laws and with a conception of the human mind as a *tabula rasa* determined by external stimuli to which the individual must adapt. Gestalt psychology introduced an organismic factor of cognitive organization, but this in turn was derived from the assumed general structure of the physiological apparatus. Thus, the cognitive processes continued to appear primarily as transmitters of physical stimuli. Learning theory stressed the influence of the history of the individual, but still proceeded on an assumption of a uniform effect. Under

the influence of psychoanalysis and clinical psychology, the so-called "new look" psychology of perception went to the other extreme of emphasizing that cognitive processes move in the direction and under the pressure of needs, as these needs arise genetically and historically. Individual differences were cited to a degree which almost implied the ignoring of the properties of the stimuli. Distortion rather than adaptation was the order of the day. Now we are witnessing a convergence of the perception-centered and personality-centered lines of thought. However, contributions along psychoanalytic lines are not being made by psychoanalysts, but by psychoanalytically oriented or informed psychologists, such as Klein or Bruner, usually under the heading of personality and perception.

In any application of the multi-layer approach to thinking we are bound to go beyond the face value of the phenomena and be sensitized to such formal principles as that of the closeness of opposites, briefly cited in the section on Motivational Dynamics. In my work on cognition, closeness of opposites could repeatedly be observed. A certain inability to tolerate complex, conflicting, or open structures was observed in the perceptual and cognitive approach of ethnocentric and authoritarian individuals.¹³ This "intolerance of ambiguity" might, it seemed, be repeated in the more purely emotional sphere in the same manner as it was found in the social area. Ranking our subjects according to their intolerance of emotional ambivalence and their tendency toward perceiving others in terms of positive or negative halos and dichotomies, rather than allowing for independent and continuous variability of traits, we attempted to ascertain just how pervasive this intolerance might be. This was done in a number of experiments on memory, concept formation, and perception proper. Present data support the conjecture that such tendencies as the quest for unqualified certainty, rigid adherence to the given, inadequacy of reactions in terms of reality, and so forth, to a certain extent tend to spread between the various areas of personality. It can be further demonstrated that such specific forms of reaction as "stimulus-

boundness," that is, the pedantic orientation toward concrete detail, tends to recur within an individual in contexts seemingly far removed from each other. Inclination toward mechanical repetition of faulty hypotheses, inaccessibility to new experience, satisfaction with subjective and at the same time unimaginative, over-concrete, or over-generalized solutions, all appear to be specific manifestations of a general disposition. It seems to matter little whether the authority to which there is submission is that of a person or that of a physical stimulus.

A situation similar to that found in the field of cognition prevails in the area of social phenomena. While Freud deepened our insight into the individual, he did not fully grasp the structure and function of social institutions. Even though most of Freud's immediate followers now tend to pay homage to these factors, this acknowledgment is very largely lip service. An important exception is Erikson, who actually worked with anthropologists and who has constructively contributed along the lines under discussion.⁶ Kardiner, who also collaborated with anthropologists,²² and Fromm, a sociologist by training,¹⁸ likewise made crucial contributions to the integration of our knowledge concerning social institutions and motivation.

THEORY CONSTRUCTION

In the process of theory construction, Freud is generally quite careful in attempting to distinguish what we now call the "postulatory" from the "operational" elements, while allowing their interplay as he moves along. However, his system would benefit from greater formalization and especially from a more systematic differentiation between basic assumptions and their derivations. For example, a combination of the assumptions of infantile sexuality and repression may be able to cover many of the more specific theorems in psychoanalysis.

Feigl places psychoanalysis at the third of the four "levels" of explanation he distinguishes, grouping it with the relatively

descriptive behavior theories of Tolman and Hull.⁷ To me, it seems that at least a certain group of psychoanalytic concepts, including the unconscious, goes beyond this level by involving what Reichenbach calls "surplus meaning."²⁴ In terms of a distinction recently injected into psychological theory by MacCorquodale and Meehl, this latter group of concepts would seem to be "hypothetical constructs," in contradistinction to "intervening variables" which are thought of as resting exclusively on the values of a specified set of empirically observed data.²⁵ In their own rather sketchy analysis, the last-named authors note that such terms as libido, censorship, or super-ego were originally introduced in psychoanalysis as intervening variables, that is, as conventionalized designations of observable properties. However, there was frequently an unnoticed shift toward hypothetical constructs.

In their arguments the authors tend to overlook the fact that statements containing intervening variables are by no means exhaustible by statements concerning their observational basis. Both Carnap³ and Hempel²⁶ have made it clear that sentences containing disposition terms cannot be fully translated into sentences about observables. Since we cannot specify all conditions and manners in which latent tendencies become manifest, dispositional statements involve "open" terms and require an infinite series of conditions in order to be tested.

The distinction between intervening variables and hypothetical constructs may, in my opinion, nonetheless be retained as a gradual one involving different degrees of indirectness of evidence or different kinds of surplus meaning. Possible relationships to the distinction made by Carnap and Hempel between postulatory theoretical constructs and concepts more directly reducible to observation could be cited. Guided by some relatively fragmentary initial empirical observations, Freud seems to have proceeded rather directly to the building of a hypothetical theoretical structure, with empirical interpretation lagging somewhat behind. In the definition of such theoretical constructs as super-ego, ego, and id, the major emphasis is on

their structural relationships to one another, rather than on their relationships to observation. His frequent oscillation between hypothetical constructs and intervening variables has afforded some protection against both a too narrow operationalism and the dangers of meaningless generalization.

CONFIRMATION OF PSYCHOANALYTIC HYPOTHESES

Considering briefly the attempts at confirmation of psychoanalytic hypotheses, it can be shown that by involving concepts more removed from the immediate data, psychoanalysis has lengthened the chains of intellectual and experimental work that connect principles with their observational protocols. We may recall Frank's statement that modern physics requires special ingenuity in verifying its theories and that this is a result of the greater abstractness of concepts.⁹ Traditional Newtonian physics could easily be verified by observation, since it was a direct formulation of everyday experience, obvious and plausible to common sense. In Einstein's general theory of relativity "the description of the operations by which the quantities involved could be measured becomes a serious and complex task. It becomes an essential part of the theory."⁹

Psychoanalysis shares with modern physics the problem that its statements do not lend themselves to the most direct and obvious types of confirmation. In each case, the highly interpretive statements involved do not carry the rules of their confirmation as obviously within themselves as do the more descriptive statements. In reviewing the extensive literature on objective studies of psychoanalytic hypotheses,^{21, 25} one is impressed by the finding that the more descriptive types of hypothesis involved in the theory of fixation and regression proved to be more readily accessible to experimental confirmation than the more explanatory ones on repression, projection, and reaction formation. This may indeed be due to the fact

that the latter are derived from the more inferential and abstract parts of psychoanalytic theory. Complex conditions, such as those involved in the analysis of transference, are required before that which has been repressed may become conscious. Misunderstandings of psychoanalytic theory have arisen when statements concerning repression, originally intended to refer to unconscious, that is, inferred rather than overt processes, were erroneously taken as purely descriptive statements of conscious contents. As in physics, a simple identification of statements containing disposition terms with statements about manifest events is not permissible. Still and all, some of the experimental studies have verified even such seemingly far-fetched psychoanalytic assumptions as symbolism.

A type of approach other than the experimental, and one that I have tried to develop for a number of years, concentrates on the principle of alternative manifestations of motivational tendencies. This principle describes the basic pattern of interrelationships between the two strata involved in all psychoanalytic theory, the manifest and the latent; it can be shown to underlie most if not all of the specific mechanisms just mentioned. The possibility of analyzing statistically the tangled relationships between the two strata, after imbuing them with some degree of operational independence, may be illustrated by two studies, one dealing with motivation in its relation to overt behavior segments,¹² and another with certain mechanisms of self-deception.¹⁰ In the former study a comparison of over-all motivational ratings with specific behavior manifestations is used for a "rational reconstruction" of the cues underlying the so-called "intuitive inferences" made by the clinicians. The same general procedure would apply to the more explicit and more scrutinizing inferences concerning motivational dynamics made by a psychologist as a scientist rather than as a synoptic rater. Knowledge of the type of drive variable involved seems to hold good promise for behavior prediction of an "either-or" type, further specification of which must hinge on other than "dynamic" factors. As previously noted, situational elements such as social

economic, or occupational conditions, must be assigned a major role.

In the study of self-deception, certain formal criteria of distortion, which may take their place alongside the more content-oriented type of diagnostic criteria favored in psychoanalysis proper, were established by means of a linguistic analysis of the individual's responses. For example, favorable self-descriptions that do not correspond to the manifest behavioral realities are frequently formulated in exaggerated terms. The use of such linguistic or semantic devices as superlatives, generalizations, and repetitions was found to be statistically concomitant with a shortcoming rather than a strength in the area concerned.

In the verification of psychoanalytic hypotheses, the systematic evidence furnished by academic psychology constitutes only one of several avenues. Psychoanalysis itself has provided confirmatory, though seldom rigorous, empirical evidence of overwhelming scope, ranging from the wealth of material accumulated from individual patients to a synopsis of dream mechanisms, lapses of tongue and memory, pathologic symptoms, and certain relevant features of folklore, myth, and other cultural phenomena. Regardless of how imperfect psychoanalytic theory may be in its formal structure, it has no rival among psychological theories as far as range of both its evidence and its explanatory power is concerned.

Some of the obstacles encountered in the efforts to separate manifest behavior and latent motivation, or surface and depth in general, go beyond the merely methodological difficulties encountered in the process of scientific verification. One of these additional difficulties is a semantic one. The vocabulary of everyday language does not furnish us consistently with two separate sets of terms, one for overt behavior and the other for underlying motivation. Unless we drastically depart from familiar usage, the term "friendliness," for example, stands either for the basically friendly outlook on life or for the techniques of friendliness, whether genuine or fake, by which this basic out-

look may be implemented or pretended, or both. This dilemma is similar to the one presented by the two-faced meaning of our common perceptual terms.² These tend to have a double reference, one to the personal and somewhat variable perceptual response, and the other to the interpersonal, measured, physical stimulus. Most perceptual qualities exhibit highly tangled relationships to a variety of measured stimulus variables. The conceptual separation of perceptual stimulus and perceptual response can thus no longer appear as a case of entities superfluously multiplied; neither can the separation of "behavior" and "motivation" with their similarly tangled relationships, as outlined in some of the foregoing paragraphs.

Certainly both the motivation and the behavior are constituted from overt behavior, as both stimuli and perceptual responses are constituted from different types of observational experiences. But motivations are arrived at through a synopsis of the constant elements in many bits of behavior. The problem of the genuineness of behavior, which I have considered crucial in the context of proving psychoanalytic hypotheses, illustrates the need for the two sets of events to be made conceptually and operationally independent of each other. In this way their far-reaching actual independence under the principle of alternative manifestations can be established. An independent nomenclature for the different levels will also have to be established. This would remove much of the temptation to fall back into an oversimplified, prepsychoanalytic, single-level or surface treatment of the motivational aspects of behavior.

It has been observed that each time separations of the kind just described had to be substituted for previous identifications in the history of science, there was irrational, emotional resistance against the recognition of the equivocations or ambiguities involved. Besides their applicability to our outlook on psychoanalysis in particular, these resistances have some bearing on the acceptance or rejection of scientific theories in general. They may also be linked with what I have called "intolerance of ambiguity."³ Acceptance of the ambiguous relationship between

motivation and manifestation, which is the chief discovery of psychoanalysis, requires cognitive tolerance of ambiguity on the part of the scientist. Its opposite, the concretistic, compulsive, and dogmatic patterns of perception and thought, so vividly described by both psychiatrists and psychoanalysts, and not infrequent among scientists, are not conducive to the acceptance of psychoanalysis.

ETHICAL IMPLICATIONS

A final word must be added concerning the true or alleged ethical implications of psychoanalysis. Together with the cognitive resistances just outlined, ethical connotations may be the chief determinants of the acceptance and further destiny of any scientific theory. It has been said against psychoanalysis, perhaps more often in the past than in the present, that its orientation is fundamentally amoral. Arguments of this kind were raised, not only by philosophers in search of a system of absolute values, but also by empirically oriented social scientists and psychologists of major stature, Weber among them.²⁹ He saw in psychoanalysis an expression of a tendency to loosen basic ethical principles. In a letter written in 1907 Weber accused Freud of proposing a psychiatric or "nerves" ethics characterized by the prevalence of the "hygienic" point of view.³⁰

Against these strictures it may be said that, with all the reservations that psychoanalysis has voiced against an overly naïve rational interpretation of ethics, there has merely been a turn against the assumed major executive principle of the traditional forms of ethics, not against their basic constructive content. This particular executive principle is the mechanism of repression. Most prepsychoanalytic ethical systems stress such inhibitory devices as the looking away from evil, its denial, or its mastery through strength of will. From psychoanalysis we have learned about the inefficiency and the dangers of these various forms of repression. From the same source we have

learned the importance of consciousness, integration, and maturity. Essential ingredients of maturity in psychoanalysis, such as rationality, overcoming of aggression, cooperativeness, ability to love and work, and courage to face internal and external threats opposing these characteristics, bespeak standards that stand up well among the traditional systems of ethics. In psychoanalysis every neurosis is considered a failure of moral control. The important historical contribution of traditional systems of ethics is the attempt to strengthen consciousness and conscience against the invasion of instincts. Through psychoanalysis we have become aware that such strengthening can be achieved only by facing and working through, rather than by merely condemning, the forces threatening our conscious personal and social values. From this latter viewpoint the mortal sin is self-deception and lack of insight, rather than lack of repression.

It may be that the diversion of attention from the functions of reason in psychoanalysis has contributed to the semblance of ethical relativism. Psychoanalysis was so overwhelmed by its epoch making discovery of the role of irrational forces that the explicit exploration of reasoning processes was temporarily obscured, even though it was reason and not the irrational that held the top spot so far as the evaluative attitude of psychoanalysis is concerned.

There is an illuminating reversal in the role played by reason when we compare the direct verbal formulations made by Freud and by Weber or Durkheim⁴ with the actual function of reason in the theoretical edifices of these men. Both Durkheim and Weber have repeatedly been described as rationalists, albeit both see the foundations of society in fundamentally nonrational moral qualities. Freud, on the other hand, has been criticized for having given too much prominence to the irrational, while actually his one hope is the overcoming of the irrational in a society built on reason. Freud neglected to explore reason directly and challenged the potency of reason in guiding human conduct, but in his evaluations of the goals of human development he has an exalted esteem for reason, and his understanding

for the vicissitudes of unreason has sharpened his grasp of the fundamental nature of reason. In this more crucial respect he is a believer in reason in the best sense of the word.

SUMMARY

In this chapter an attempt was made to appraise the scientific legitimacy and operational status of psychoanalytic concepts and to indicate some of the current trends relating psychoanalysis to academic psychology and personality theory. Methodological and theoretical criticisms leveled at psychoanalysis were reviewed, with particular emphasis on the role of manifest behavior and latent motivation, theory construction, confirmation of hypotheses, and ethical implications. Much of the seeming absurdity of psychoanalytic assumptions is resolved by setting them side by side with established physical constructs, which in many cases are as much in opposition to the perceptually given as are those of psychoanalysis to the data of manifest, "phenotypical" introspection. While we must grant to the psychoanalytic system many more elements of a truly scientific theory than is commonly realized, it still remains true that psychoanalysis contains many metaphors, analogies, and confusions between constructs and facts, of which it can and must in the end be rid. However, regardless of how imperfect psychoanalysis may be in its formal structure, it has no rival among psychological theories of personality as far as the range of both its explanatory power and its evidence is concerned.

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X

Personality Dynamics

IT IS A COMMON-SENSE ASSUMPTION that men and animals are impelled by certain forces, motives, or drives which elicit and direct their behavior. It is a difficult problem, however, to know how these forces develop and, more specifically, what the fundamental needs at their roots are. Some psychologists hold that only needs already present from the very beginning of life can be called fundamental. Adult motives and interests are considered secondary motivations derived from those which are fundamental. Thus this trend in motivation theory is biologically oriented, since needs present at life's beginning are biological in nature.

Medical or clinical psychology, and more particularly psychoanalysis, were guided in their search for fundamental human motives by the theory that non-satisfaction or frustration of certain needs results in behavior and personality deviations. It was therefore claimed that needs found at the roots of personality disorders should be considered fundamental. In both trends, the biological and the psychoanalytical, adult motives are derived from organic or infantile forms of drives. Several mechanisms or processes are devised in order to bridge the gap between the elementary needs of the infant and the very complicated motives of the adult personality. For example, the learning process and canalization do the job in biologically oriented systems, fixation,

identification, sublimation, compensation, and other mechanisms achieve this aim in systems of clinical psychology. Man, having developed into an autonomous adult personality, is not provided with specific motivating forces. His dynamic structure is considered a secondary transformation of biological or infantile needs. There appears to be no place in these systems for personality dynamics.

In this chapter we will try to discover whether there are any fundamental personality dynamics, i.e., needs and motivating forces developed within the framework of adult personality functioning. If there are such dynamics, how do they develop? Any theory of personality dynamics must be intimately related to the concept of personality itself. If it is found that personality constitutes a specific and irreducible way of interacting with the "world," it would follow that personality dynamics must be contained within the framework of this behavioral interaction. A more behavioral concept of basic needs would result. Conceiving of human needs in this way, we will try to examine to what extent the concept of an "impersonal" quantity of energy applies to man's basic needs.

DYNAMIC ORIENTATION

In more philosophically oriented psychologies free will is considered the dynamic function on the personality level of human activity. However, to examine the foundations of responsibility, human freedom, and self-determination, the concept of will was studied in rather moral and metaphysical contexts. Thus, the traditional doctrine of free will is not based on a really dynamic personality theory and does not contain a psychology of motivating forces. Rather, it is said to be motivated by what is "good," and "good" is defined as that which is motivating or attracting the will.

In modern psychology Allport attempted to provide the adult personality with a proper dynamic status, one not derived

from infantile or instinctive drives.¹ His theory of functional autonomy of adult motives is sufficiently well known not to require further exposition here. Unfortunately, Allport's efforts are concerned mainly with detaching personality motives from instincts and infantile forms of drives, and I can completely agree with this negative part of his work. On the positive side, Allport fails to provide personality with a dynamic system. The adult behavior patterns, he says, become self-sustaining, having their motivating forces within themselves. The old ex sailor, for instance, has a craving for the sea, notwithstanding the fact that the original motive for sailing, the struggle to earn a living, no longer exists. Now he is a wealthy banker, but the "hunger for the sea persists unabated." Sailing behavior has become a motive in itself, Allport argues. He supposes that the very doing of something entails the desire to continue it. According to Woodworth's theory, the behavior pattern itself, i.e., the mechanism of doing it, becomes a drive.¹⁰

In the face of much contradictory evidence Allport modified Woodworth's original statement, "Mechanisms become drives," to the extent that only mechanisms in the making are believed to become drives. Once mastery of a task is gained man is no longer interested, the mechanism ceases to act as a drive. Here, however, resides the main problem. Why does only behavior in the process of perfection find a motive in itself? It seems that precisely the urge for perfection, for mastery, for achieving something, is the motivating factor in this case and, probably, in personality as well. Thus the behavior pattern or "mechanism" should not be considered self-sustaining. It seems, instead, to be elicited and directed by dynamics which cannot be identified with the behavior mechanism.

A similar difficulty is encountered in a more recent motivation theory described by McClelland *et al.*¹¹ The authors conceive of motives as developing out of growing "expectations." The child, they ascertain, "develops gradually certain expectations about what self-locomotion or a toy car will do for him and gets pleasure from confirming these expectations as long as

they remain somewhat uncertain." In order not to become bored, the child "must continually work with more and more complex objects or situations permitting mastery." In adults, the authors continue, expectations developed over a whole lifetime may consist of "doing a good job, being a professional man, etc." It seems difficult, however, to explain why the confirmation of expectations such as "doing a good job," "being a professional man," etc., arouses such an astonishing amount of motivation and effort, while some other lifelong expectations on the purely cognitive level are abandoned easily in the face of contrasting reality. For example, provided no deep personality commitment is involved, a scientist, on accidentally discovering some new facts, may easily abandon not only lifelong but centuries-old concepts and expectations which are not in accord with these new findings.⁸

Fundamental dynamic orientations seem to be implied in some "expectations." McClelland observes that expectations must remain "somewhat uncertain" and that situations "permitting mastery" are required. This points to the same difficulty experienced by Allport. The problem is to discover how to conceive of these fundamental dynamic orientations. In order to formulate them, an adequate conception of personality itself must first be gained.

A "RELATIONAL" THEORY OF FUNDAMENTAL NEEDS

Psychologists generally consider personality an internal organization of traits, attitudes, aptitudes, and behavioral consistencies. In such a definition, however, the most important characteristic is lacking. Essentially, personality is a structure going beyond its internal organization. Its most characteristic feature is that an outlook on and an exposure to the world are included in its constitution. Personality is a way of being and behaving in a world that exists for the self. This outlook on a

world or life situation is an essential constituent of personality. In this sense, the fundamental structure of personality is an "ego-world unity." Nothing could more profoundly mutilate the concept of personality than neglecting this aspect of exposure to the world. If, as Lewin says, it is true that the personality governing behavior is a part of the psychological field,⁵ it must not be forgotten that the psychological field itself, in the general sense of "living in a world," enters into the composition of personality.

Personality conceived as an "ego-world" structure offers a sound basis for a theory of human motivation. At present, motivation theory tends to situate and localize needs in the organism itself. From the behavioral point of view, however, needs are not considered as organic states, but rather as basic patterns of "organism-environment" or "ego-world" relations, required for organism or personality functioning. It has been ascertained that the organism languishes and even dies when some definite modalities of interaction cannot be established. This is very clear and evident at the biological level of life.

The point to be emphasized here is that personality is composed of different types of relations; there are not only biochemical interactions, but also interactions on the level of cognitive and affective relations with a meaningful world. These relationships are no less essential or fundamental in personality functioning than are biochemical interactions. Specific personality dynamics also exist in the framework of the relations between the ego and its "world." There is, however, an essential difference. The ways in which biochemical interaction between the organism and the environment develop are innate to the organism itself and are firmly established. The basic interaction patterns are preformed in the organs and in the tissues of the body. The kinds of biochemical interaction needed, i.e., the physiological needs of the organism, are "given" with the organism itself; they are nothing else but physiological states to be restored or maintained by food, air, or bodily contacts. Some innate behavior patterns, frequently called instincts, assure these needs.

sary relationships between the organism and the environment. In this way, the channels of biochemical interaction and the corresponding activities and drives are, to a large extent, preformed and fixated in the organism. This is especially true for lower animals, whose behavior consists primarily of innate patterns of dealing with their environment. In a word, their motivated ways of communicating with the environment are "innate," stable, and uniform.

The second type of relationship, i.e., the interactions which constitute man as a personality living in a meaningful world, are not innate to organism. The human personality consists of building up, progressively and by means of personal behavior, an individual constellation of ego-world relations. The specific ways in which man, as a personality, becomes integrated into his environment are matters of individual behavior, determined by a large number of internal and external elements.

Personality motives and needs are to be conceived, then, in the framework of personal ego-world interactions. This means that, at this level of personality functioning, man needs some specific modalities of relationships with his world, i.e., with his fellow men and all beings, realities, and values of which his personal world is composed. It has been found, for instance, that human personality becomes disturbed or enters a state of anxiety when certain relationships are broken, or become impossible, or are difficult to establish. The nature of the fundamental needs in a living being will depend on the kind and complexity of relations it is able to entertain with the world. At a stage of development where life consists only of biochemical interactions with the environment, only physiological needs will exist. But a whole new personal behavioral world gradually comes into existence for man through the development of specifically human functions. Cognitive functions, for instance, create a world of meaningful objects, life situations, transcendent realities, values, and problems non-existing for living beings which do not interact with the environment in the same specifically human way.

It makes no sense to claim that the cognitive activities which

produce in man this new meaningful world are less fundamental or are simply "derived" from biological interactions with the environment. The truth is that both are essential components of personality functioning. It is more sound, therefore, to conceive of human life as consisting of a whole complex pattern of relationships, and to consider the needs existing in the framework of these "ego-world relations" as fundamental as the biological needs.

As has already been noted, these new kinds of behavioral relations with the world are not "preformed" or fixedly established in the organism, as is the case with the instinctive relations between the organism and the environment. Man is able to communicate with his world of objects and fellow men in an infinite variety of more or less self-selected ways. Behavioral contacts originate to a large extent under the influence of cultural and other factors, and a certain uniformity may exist within the framework of a given background. Unique individual experiences and circumstances also play an important role, however, and each individual way of behaving, feeling, and thinking in contact with the world is somewhat different. On the specifically human level there are not the same uniform ways of behaving and striving which are found at the biological and instinctive level of interaction with the environment. Man deals in innumerable ways with innumerable life situations, always striving for an innumerable variety of ego-world relationships or concrete purposes. His goal objects and motives vary enormously.

and fellow men. Fundamental personality needs should rather be considered as general directions in the various ways man tries to deal with his fellow beings and with all the real or imagined entities in his world. Fundamental needs are the most general modalities or types of relationships which individuals need and search for in the innumerable concrete forms of behavioral contact with their world. The discovery of fundamental needs consists precisely in finding such general orientations in the variety of human motives. In other words, it consists in discovering some uniform meaning in all these different ways of behaving. The meaning of a behavior pattern is established relative to the goal with which it is consciously or unconsciously related or to which it is directed. The thesis that there are certain fundamental needs does not imply that man's behavior is motivated by forces stemming from a few innate instincts or infantile drives. It means that some general orientations can be discovered in the varieties of human behavior. The undetermined character of personality dynamics does not entail that fundamental needs are purely abstract constructs without any dynamic property. Plasticity and flexibility are the main characteristics of personality functioning, as shown by cognitive behavior and concept formation. Thus, for instance, self-actualization and the need for contact are not pure concepts, but may be functionally compared with concepts, insofar that both are able to concretize in innumerable ways and can be found only in concrete forms. Another analogy between concept formation and personality dynamics was recently developed by Leeper.⁴

The general dynamic orientations underlying and motivating behavior may not be clearly conscious to the behaving personality. It has often been found, however, that more careful consideration succeeds in discovering certain general directions in the different ways a man tries to deal with situations, and in the projects he tries to realize.

The patterns of ego-world relations which constitute the infantile personality are different from the adult ego-world structure. The same significant trends, however, may be discovered in both. There may be infantile and adult forms of the same basic

need, just as there are infantile and adult patterns of ego-world relationships. There is no reason why the infantile form should be considered the basic one and the adult pattern the derived or secondary need. Both are varieties of a basic type of ego-world relationship "needed" by the individual to maintain and develop the functional "organism-environment" and "ego-world" structure constituting personality at a given stage of its development.

In recent years several psychologists and psychiatrists have mentioned a two-directional trend manifest in human motivation.^{2, 3} One direction is named self-determination, self-actualization, need for achievement, self-preservation, self-consistency, etc. The other is variously labelled self-surrender, need for contact, affiliation, participation, integration, or love. These may indeed be different aspects of the most fundamental and general directions observable in all concrete human motivation, and thus considered fundamental needs. This means that they pervade and permeate the whole scale of man's behavioral dealing with the world, his ways of conceiving of God and his own destiny, as well as his more biologically and socially bound behavior patterns. Individuals' concrete motives can be very different according to their personal pattern of entering the world, but fundamental needs, the general directions in their motivations, may be identical.

It should be added that the two fundamental needs just mentioned are very intimately related to each other. Both seem always present in any concrete motivational structure. Self-realization is possible only in and by contact with others: This is achieved by some people in a more "constructive," and by others in a more "defensive" or "destructive" way (love versus aggression). The contrasting kinds of behavior, love and aggression, are not, however, fundamental drives. Rather, they are two modalities in which man tries to realize himself via his need of contact with others. Both modalities appear to be partially determined by previous experience and constitutional factors. Anxiety, on the other hand, seems to be psychologically aroused when all behavioral and affective contact is broken or threatens to break.

This psychological isolation makes it impossible for the individual to realize himself, to get consideration, or to find any meaning in his existence. Anxiety, therefore, is the extreme negative manifestation of the need for contact and self-actualization.

Since fundamental needs are very general trends discovered in and abstracted from the great variety of concrete behavior patterns, it is obvious that they may be formulated in very different ways. They may be considered also at different levels of "generality" or abstraction. For example, some psychologists speak of the exploratory drive or of the gregarious instinct as a fundamental need in man. But the exploratory drive may be a manifestation in some people, more so in males than in females, of the need for self-actualization. According to the theory of ego-world unity, self-actualization means actualization of the ego by more extended relations with and entering into the biological, social, and universal world via physiological, cognitive, and other kinds of interaction. The gregarious instinct, however, is a specific concretization in some people of the need for integration and contact with the world of fellow men. The individual is not always aware of the general orientations underlying his concrete and immediate motives. This unawareness of the fundamental need underlying a concrete motive is what is frequently meant when the term "unconscious" is applied to motivation.

PERSONALITY CHARACTERISTICS OF NEEDS: NEEDS AS PERSONAL PROJECTS

Along with the "relational" theory of needs, a second point should be stressed. A need does not exist in man as a quantity of impersonal energy tending to discharge. The very fact that even a child is vaguely aware of himself and of the world in which he is living, affects very deeply the concrete forms in which needs exist in man and act on his behavior. The development of man's cognitive functioning implies that a world of

meaningful situations is available to him and that his existence is experienced as something personal, i.e., as an ego behaving in the world⁹ (Here the term *ego* is used in the sense of a "personalized" whole of behavior patterns, as an "I") Ego-world relations and the needs rooted in them exist in man as personal and inhering conditions of the ego. A concrete need becomes "I looking for something" or "I wanting something." Incorporated in the whole pattern of physiological and psychological activity constituting the human person, a need is the dynamic aspect of a personal way of existing and behaving. Therefore the Freudian topological conception of needs as a zone of impersonal energy, separated from the sphere of the ego, is necessarily inadequate. From the behavioral view, a need is a pattern of ego-world relations in a state of tension.⁷ It works as a personal effort to deal with the world in order to realize a certain pattern of such relationships. In other words, the personally experienced need of an individual, dealing cognitively with the world, results in anticipation and expectation, manifesting itself in a kind of personal project or task.

Stated more concretely, the sexual instinct, as it manifests itself in the Oedipus complex, is a need in the form of a task. The boy is impelled to attain the audacious project of establishing a complicated pattern of ego-world relationships, i.e., gaining the love of his mother and replacing the father. The dynamic basis of the identification process also implies that the child is driven by the task of behaving in the same way as his father. The child eventually seems to be moved by efforts toward self-realization via the image of his father. In a more general sense, the need for love may be, to a certain extent, an impulse and an effort to "gain" or to "conquer" affection. This is, at least implicitly, an attempt to attain a project of relationships with one's fellow men. Lack of affection is not only a quantity of non discharged energy, it also represents a personal failure, the ego failing in its task to gain affection or feeling incapable of succeeding in the effort of entering the world of others. This is the reason why the infant reacts to lack of affection with a

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**Femininity
and Existential
Psychology**

EXISTENTIAL PSYCHOLOGY has been developing in European countries for more than forty years as a theoretical approach to the understanding of personality, whether normal or abnormal. In this chapter an attempt will be made to present some of its basic aspects, including its relationship to traditional experimental psychology, psychoanalysis, and phenomenology. The nature of femininity will be considered with particular emphasis on the performance of those movements which are believed to constitute the dynamic foundation of feminine existence.

EXISTENTIAL PSYCHOLOGY

Relationship to traditional psychology Existential psychology does not perceive man in the same frame of reference as psychologists did formerly. That is not to say, however, that existential psychology questions all results of traditional psychology. There is wholehearted agreement with Boring's definition: "Psychology is the study of *human nature*. It is the study of man, man as a living being, acting in an ever changing world.

responding to things and events and other people. If you know what a man is, if you know the full answer to the question about the nature of man, then you know what human nature is and what psychology comprises."⁴ Dissension occurs only when attempts are made to define man more exactly.

It may be questioned whether it is true, as Boring maintains, that all knowledge of man is the result of investigations "of the behavior and characteristics of this active mass of protoplasm which is man and which the psychologist has come to call an organism." A personality theory based on this concept has to interpret psychological facts about man as an interaction of the effects of a structured inner life and a physical world. This differentiation may be of practical value. It gives us a chance, in daily life and in the social sciences, to speak without prejudice about subjectivity and objectivity, and of their causal relationships. Inherited and acquired abilities and dispositions can be considered realities, as can the contents of consciousness and of the unconscious, and all models and schemes that represent psychic phenomena as related to space and time.

In accepting this view we do not realize that we are caught in a kind of mythology. This mythology is so widespread that it has been forgotten that it originated in a monosymptomatic emphasis on one aspect of life, an aspect based, like every mythology, on an attitude of objectivity, rationalism, and causality. Although operational notions have great value for systematizing behavior, for collecting statistical data, and for making predictions, it is evident that an increasing number of psychol-

"*Lebenswelt*."* Psychology is given this task not by child but by observation. As the Holy Bible observed "Your heart is where your treasures are!" Existential psychology is based on the primordial fact of human existence† If one wants to know what man is like it is best to study the dialogue of man with objects and with his fellow men. It is impossible to know an individual without taking his personal world into account. A painter can easily be recognized by his colors and themes, a child by his toys. Existential psychology then means first and foremost analysis of the meaning structures of the personal world toward which all activity is directed. This may be investigated empirically. For instance, to comprehend the characteristics of feminine existence one has to deal with the situations in which woman is involved, with the 'what' of her experience, with the meaning of her fundamental intentions.

Relationship to experimental psychology Observations in classical experimental psychological studies indicate certain relationships between experimental and existential psychology. It was noted, for example, that even the simplest phenomena perceived, such as colors, sounds, and scents, are far richer in their meaning than the descriptive concepts suggest. This richness becomes evident when we see these qualities (of colors, etc.) in connection with our personal world. Murray recognized this when he wrote that psychology, 'instead of beginning with studies of the whole person adjusting to a natural social environment, began with studies of a segment of a person responding to a physical stimulus in an unnatural laboratory environment.'¹⁰ While there are certain relationships between existential psychology and experimental psychology that cannot be overlooked, there is also one important difference. This has to do

* "*Lebenswelt*" must not be confused with Lewin's "effective environment or life space." It encompasses all meaning the individual finds in his world.

† "Existence" does not imply the factual being of man but his being here in the sense of existential philosophy. That is, the "here" of his being in existence is the world the given and historically developed structure of meanings determining his behavior.

with the concept of "situation" as conceived of in existential psychology.

"Situation": Existence means being in a situation. Traditional psychology thinks of very sober situations in this respect, such as those which challenge the intelligence of the subject. Should we not leave the laboratory and turn to other situations, e.g., to an unexpected meeting with an old friend or a personal enemy, or a situation in which we were laughed at or in which we were particularly successful? Quite apart from such special situations man incessantly finds himself involved in a system of circumstances having a special meaning for him. Even man's discourse with himself is an expression of a situation. There are inescapable situations that originate in objective aspects of the body, in nature, and in the past. Through his experiences each individual is involved in a texture of human relations; he is forced to live in the world of others. In contrast, some situations are manifold in their meaning, poorly defined, variable, and subject to personal decisions. In this context it is especially important to realize that man is in this world with his body and that the body itself is a situation, the meaning of which has to be considered. Its meaning lies in the movements of existence, bodily movements of perceptions, and actions. Although such movements are very variable, their extent and range are made possible and are limited as well by the biological constitution, which forms the pre-existential basis for the development of meanings gained from confrontation with things and fellow-men, beginning in early childhood.

movements, insofar as they express a specific relationship to the world. What were formerly called "temperamental traits" form the basis of this dynamic pattern. In German psychology Kretschmer and others gave "dynamic" a similar meaning. It is difficult to analyze a "dynamic pattern", rather, it must be seen as an image.

When the use of the word "dynamic" differs from psychodynamics, this implies a certain independence from psychoanalysis. There might even be some kind of antagonism. As far as modern forms of psychoanalysis are concerned, however, this is not the case. Relationship to psychoanalysis is rather of a supplementary nature.

Van den Berg gives a very instructive example regarding the psychoanalytic view of trauma (psychotrauma).²³ The older formulations had been quite unacceptable to existential psychologists, but "The time when psychotrauma was regarded as an objectively registrable fact, with the patient helplessly at its mercy, has been left far behind. Whoever turns to more recent psychoanalytic publications perceives that increasing importance is attached to the 'situation' in which the psychotrauma occurs." While van den Berg welcomes this change of opinion, he would like to see the meaning of the situation stressed even more. Citing examples from his therapeutic practice, he holds that "the situation makes the psychotrauma possible or calls it into being, there is no psychotrauma without a difficult situation."

Other psychoanalytical concepts also appear in a different light when seen from the viewpoint of existential psychology. The so-called depths (of the psyche or of the unconscious) are the depths of the meanings of all that has acquired significance for the individual, i.e., every phenomenon that has become a source of his existence, such as the mother image, for example.

Relationship to phenomenology. Existential psychology is closely related to the phenomenological method. The relationship is so close that in many publications the term "phenomenology" may be replaced by "existential psychology," e.g., in

van den Berg's book, *The Phenomenological Approach to Psychiatry*. Nevertheless, existential psychology and phenomenology are not identical.

First of all, it is necessary to know what is meant by "phenomenology" in this context. Like "dynamics," the word "phenomenology" has another meaning than that given by American and some European psychologists. In America phenomenology relates to the "psychic interior," to subjective experience. Existential psychology considers phenomenology a method of understanding the "existential project" of other people. Wellek's contribution to this volume provides an excellent introduction to this concept.

This history of phenomenology has been well described by van den Berg,²⁸ and was briefly outlined in this volume by Ellenberger. Much of it may be traced back to the work of Dilthey, first published in 1894.¹⁰ His claim for a descriptive and interpretative psychology stimulated Jaspers to formulate his psychiatric concepts.^{13, 14} The views of two other German philosophers, Husserl¹² and Heidegger,¹¹ influenced the Swiss psychiatrist, Binswanger, who contributed mightily to the further development of the phenomenological method in psychiatry and psychology.¹⁻³ Straus,²⁴⁻²⁷ von Gebattel,²⁹ Minkowski,¹⁸ Boss,^{5, 6} and others joined in these endeavors. Further contributions were made by existential philosophers, including Sartre²⁰⁻²² and Merleau-Ponty^{16, 17} in France, de Waelhens⁹ in Belgium, and Heidegger¹¹ and his disciples in Germany.

The phenomenological method, especially in the form given it by Jaspers and Binswanger, was the very tool with which the way to existential-psychological problems was opened. Tasks were clarified and evidence adduced for the importance of its approaches. Now that existential psychology has obtained more recognition, other methods are also being developed. Some indications of this trend are cited in this chapter; other examples are given in van Lennep's contribution to this volume.

objects. More research will have to be done, however, especially among different populations, to learn whether this dynamic difference among the sexes is the same everywhere.

Movement, genetics, and culture: Feminine dynamics are adaptable in nature. As Gesell has noted in three to four year old children, there may be differentiated coordination as well as less developed rigidity. The more expansive and brusque movements of the boy give an appearance of resistance to the task with which he is confronted, a hurdle to be overcome without revealing his differentiated nature. Masculine activity is determined by the experience of resistance. Resistance and victory over it are the fundamental themes of the intentions, which, from the phenotypical point of view, characterize man in our society. This existential theme explains masculine psychological characteristics. The pliant, adaptive movement does not create a world of hurdles, but leads to the discovery of qualities, forms, and value-meaning-textures, which are quite different. Although this discovery is never complete, it produces more of an adaptation, a feeling of being at ease with the world.

Thus there seems to be a particularly feminine world, partially due to the inherited dynamic difference between the sexes. However small this difference may be, its effects are all the greater because our culture and methods of education, which begin in the cradle, tend to accentuate masculinity in boys and femininity in girls.

The originality of the feminine world can be deduced not only genetically and empirically, but also from two aspects that characterize every human existence and consciousness. Movement that is full of expansive aggressiveness is equivalent to the intentional consciousness that naïvely projects a world outside itself, one built by victory over resistances that become material for *homo faber*, the creator of values. In contrast to this is the adaptive and conforming movement, which is equivalent to a consciousness that sees itself in togetherness-with-the-other, discovering values. This act, ascribed to the woman in our culture, negates the expansive and aggressive intentions, and becomes the

condition for creative activities, building the existence of a *homo eroticus* who will grow into a *homo curativus*. It must also be noted, however, that in concrete life situations there is no exclusively masculine or feminine existence. To be human always implies both possibilities.

Human existence is a cultural existence. Just as a human being can never eliminate from his reflective or spontaneous consciousness that he is human, he also knows, in every movement of his unreflective life, that he is a man or a woman. This means that in every culture, beginning with earliest childhood, the entire system of norms, traditions, and values determines the development of a characteristic motor style. While the dynamics of being a man or a woman may be inherited, the "existence" has to be acquired. To reach a deeper understanding of the psychological characteristics ascribed to the woman, an investigative approach must be based on genetic as well as on cultural aspects.

Feminine emotions. Does it make sense to speak of the strong emotionality of women? What is meant by the term "emotionality," and what is its meaning relative to existence? Sartre²¹ develops Scheler's thesis "*Le déroulement des sentiments intentionnels nous découvre le monde même des objets mais sous l'aspect de la valeur*" (The development of intentional sentiments shows us the same world of objects, but relative to their meaning).²² The essence of modern theories of emotions is that these are not considered epiphenomena of little importance with regard to ability and volition. They are meaningful acts through which a human being faces the world comprehending it correctly and precisely. Without a phenomenological analysis of the act in a situation and of the behavior, the meaning of a sentiment in any given case cannot be determined. When a woman starts weeping because she says she can no longer control herself and does not know what to do, the reason for her behavior may be that she has discovered the indifference of power of the world, or has decided to keep silent, or it may be that capitulation seems to her the easiest way out of the situation. If we wish to understand the emotionality of women, which

everyone takes for granted, then this so-called stronger sensitivity cannot be considered a "natural" characteristic. Rather, it is woman's "second nature," a product of civilization. Early childhood training, in all the more highly developed cultures, has "made" women more emotional than men, largely as a result of the intimate relation between adaptive dynamics and emotionality. The discovery of qualities and of meanings presupposes a sensitive being. This is seen in the adaptive movement of touching, in a sympathetic glance, and in attention to the "subtlety of things" (Nietzsche). There is also a cultural motive for feminine emotionality. Since the girl is *forced* to assert herself in a less masculine, that is, in a less rational way, social situations demand that she transform the world with her emotions, almost as if by "magic."^{21, 22}

The relation between dynamic foundations and emotionality is evident in various higher animals. The female is more flexible and the male is clumsier but also more expansive, aggressive, and brusque in his movements. The work of Hall, Stone, and Cole on the temperament of rats has shown that it is possible to breed "emotional" offspring by careful selection of parents.⁸ Similarly, there was a correlation between emotionality and timid, submissive, less aggressive behavior. These and other observations of animals suggest the likelihood of a similar relationship between physical and psychological characteristics in children. There seems to be a biological foundation for existence, beginning with the relationship of the infant to the environment. Many studies will be needed, however, to learn and to understand more about child behavior during the first year of life. The research of Margaret Mead has already shown that the formation of initial meaning structures has a decisive influence on the direction of future development.¹⁵ Cole correctly states: "In their general behavior and in the details of their physical developments there are wide differences in the newborn. Some are sluggish and somnolent, others are placid but responsive, still others are fretful, irritable, easily frightened and prone to cry. The placid ones may nurse easily when first given opportunity;

some of the sluggish ones will have to be taught."⁸ We know that these observations are of great value, but their meaning for the characterology of individuals and groups depends on the analysis of phenomena that are provisionally described as "sluggish, fretful, frightened, placid." Do these terms describe purely biological phenomena? Or do they indicate meaningful ways of behavior resulting from unreflected movements, that are nevertheless conscious as forms of body awareness? What influence do the reactions of the mother have on a certain baby, on the development of his intellect and irritability, and on his adaptive or aggressive dynamics and resulting characteristics?

There is only very limited information available to help answer such questions. Of some interest are the observations of Sontag and Nelson on the development of a characteristic life style in each of three identical triplets. At eight months the weakest triplet "was well on his way to becoming the typical spoiled child. By the 30th month the three boys had each developed a characteristic of life style, and these styles persisted throughout the period of the study" (nine years).⁹ For characterology and for the study of the relation of the little girl's dynamics to feminine existence, Cole's additional summary comments are also very important. He writes: "Biological differences there were, at birth, and these differences produced not only different needs and different capacities of responding to stimuli from without, but also different responses in the human environment. Crucial to the outcome, too, was the cultural framework that had previously defined and interpreted biological differences of this type." In reality, then, man is an "*être historique*" (Merleau-Ponty), beginning with his first days of life.

Female muscle power: How the reciprocal relationship between physical characteristics and cultural framework determines a way of existence can easily be demonstrated by the influence of muscle power. The famed weakness of the female muscle is mentioned by all authors who deal with problems of the sexes. It is a natural fact and holds meaning in various situa-

tions. Physiology, however, teaches that actual muscle power does not depend on the development of the muscles, but rather on muscle innervation. While innervation may tend to compensate for constitutional muscle weakness, it can also serve to demonstrate this weakness continuously.

More than one woman is physically stronger than a great number of men. But a little girl who is stronger than a boy of the same age does not represent a boy and is still considered representative of the weaker group. Bodily facts as such are of minor importance in comparison with the meaning ascribed to the human being as a person and as a social individual. Psychology must not restrict itself to the confirmation of objective facts, e.g., muscle power. What are needed are investigations designed to reveal the meaning of this power and its function in the individual.

SUMMARY

Existential psychology emphasizes the analysis of the meanings of situations in which the individual constantly finds himself involved. Situations of this sort are formed not only by natural and social relationships, but also by the body and its biological constitution. The nature of feminine existence originates in the confrontation of the world with a body that is essentially different from that of the male. Different kinds of movement develop which form a dynamic foundation for the female personality.

These rather simple remarks may open a fresh perspective for future research. We may be guided by Merleau-Ponty's observations: "*Le corps n'est pas une chose, il est une situation*," (The body is not a fact, it is a situation), but we will have to add that the body itself is a fact, a structure of facts. We shall need profound analyses to comprehend the relation between fact and meaning. The study of facts is "natural science"; the

study of the meaning of facts in the content of human existence is psychology

Man is not a predetermined fact nor does he represent sheer freedom. Freedom of existential projection is limited by personal background, by situations, and by the body. Man and woman, at every moment of their existence, are a unity of "fatalité et élan"¹⁸

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The Levels of the Mind*

PSYCHOLOGY FIRST BECAME A SCIENCE in the middle of the nineteenth century. Its aim then was twofold: to reduce the boundless variety of psychic life to its simplest elements; and to reconstruct the diversity of perception from the elements of sensation and the complexity of emotion from the simple qualities of pleasure and displeasure. After some time it was realized that psychic life was regarded too mechanically and should be interpreted instead as an organism following the law of wholeness. Mental life was considered a living whole, composed of manifold ideas and thoughts, moods and emotions, drives and strivings, attitudes and actions.

In a second phase of scientific psychology, in Germany at least, a structural psychology and holistic Gestalt psychology evolved. Both had in common an insistence on the overlapping interrelations of psychic phenomena, originally considered only separately. Implied in this fresh approach, however, was the concept of a hierarchy among the distinct mental processes and

* This is a translation in condensed form of a paper originally published under the title—"Schichten der Seele." *Universitas*, VIII, 241-50, 1953. The translator, Dr. Albin R. Gilbert, has followed the author's words as closely as possible and succeeded in reducing the length of the original article while preserving its essentials. Because of the simultaneous translation and condensation it was not deemed advisable to indicate omissions. For a more extensive presentation of stratigraphic theory, the reader is referred to Dr. Gilbert's chapter.

states. It is this further aspect of the concept of structure which has led German psychology of the last few decades to regard the mind in terms of stratification, a view now steadily gaining ground. In the paragraphs to follow a brief attempt will be made to consider varied aspects of stratification, levels, and functions, as well as personality development and integration.

THE CONCEPT OF STRATIFICATION

Three sources contributed valuable suggestions to stratification: Freud's psychoanalysis, brain physiology, and philosophy.

Freud distinguished between the unconscious sphere, the id, and the superimposed ego, which admits only those psychic impulses conforming to the general requirements of what is good, proper, and permissible. This is the first, if one-sided, approach to the concept of mental stratification.

A second approach was derived from modern brain research. In the previous century a connection had been discovered between the cerebrum, or new brain, and the functions of perception, language, reasoning, memory, and directed action—all mental processes directed toward orientation in the world. Later, insight was also gained into the relation between the genetically older brain stem, or old brain, and the processes of affectivity, conations, and emotions. This led modern brain research to the distinction between the cortical person and the depth person. Thus the brain physiological theory contributed another suggestion for mental stratification.

A third root of stratification theory stems from philosophical ontology, the theory dealing with the structure of reality advocated by the late German philosopher, Nicolai Hartmann.

References to mental stratification bring to mind the model of geological stratification. The use of a spatial simile is perfectly legitimate as long as one keeps in mind that this image is only an aid to intelligibility and has its limitations. In reality mental processes are wholly interconnected and interwoven

Every perception is integrated with an idea and an emotion; and every emotion with a motive. Thus, the mental strata to which present day psychology refers are not mutually isolated as are the layers of geology, but are actually interpenetrating.

LEVELS AND FUNCTIONS

All theories of stratification agree on the distinction between experiences attained in consciousness, initiated and directed by its executor, the I-function. There are, for example, attempts to solve a mathematical problem, remembering something stored in memory, focusing attention on an observed object, or controlling actions in the deliberate pursuit of a goal. Differentiated from this group of mental processes is another, not initiated and steered by the I-function, but stemming from a deeper region. In this category belong such conditions as affects, emotions, feelings, and moods, as well as drives, desires, and strivings. This layer is designated as endothymic ground. The name is derived from the Greek, *endon*, meaning "internal," "within," and *thymòs*, "emotion, frame of mind, mood."

Within itself, the endothymic ground is hierarchically constructed. Sustaining the motives and emotions, stirred by contact with the world and predetermining them, are relatively stationary dispositions. They include vital moods such as cheerfulness, peevishness, melancholy, or anxiety. Intertwined with the vital mood, though not identical with it, is another stationary disposition, self-reliance, the awareness of one's own power and worth in facing the world.

Above the level of stationary moods and embedded in them, as it were, are the endothymic processes of motives and emotions. In them there is embodied the theme-pattern of life, for whose characterization language has created such a wealth of names. There are the elementary drives for self-preservation and for sexual satisfaction; the specifically human motives of egoism,

will to power, and the need for social approval, and finally, the higher desire for learning, for esthetic experience and creation, and the social motives of benevolence and love

Intimately interwoven with the motives are the endothymic processes of emotion. They indicate the significance of things and events for human striving. Thus terror, fear, and distrust can be understood as an outgrowth of the need for self preservation. Envy and malicious joy flow from the theme of egoism, sympathy from the altruistic need to help.

All these experiences have in common a capacity to seize and grasp man. Stirrings from the endothymic ground are of a pathic nature. The normal mature adult is, however, not abandoned to this endothymic surge, his behavior is not determined by these experiences. Rather, he can hinder and suppress some, and give free play to others. The processes involved are volition and thinking. The will determines the extent to which endothymic processes and states may influence behavior and actions. Thinking gives insight into the possible consequences of such freedom and shows the range of suitable and unsuitable means of pursuit. This level has been designated as the personal superstructure.

The function of will is that of self control and self-discipline, concentration of attention, ability to form resolutions, and the direction of psychic energy into the pursuit of a goal. In volition, the conscious I ascends like an island from the agitated ocean of endothymic life. It is the Archimedean point from which behavior and actions are controlled. Similarly, thinking springs from the initiative of the conscious I function.

What makes mental life rich, deep, colorful, and creative, are the endothymic experiences. The direction and meaningful marshalling of their dynamics rest with volition. This function could not be fulfilled, however, if thinking would not reveal meaning. Only cooperation of the endothymic ground with the personal superstructure produces that unity of the human mind described by the concept of 'human personality.'

PERSONALITY DEVELOPMENT
AND INTEGRATION

The suggested dichotomy of psychic life does not exist, to be sure, in the early stage of development. The child at first, and for a long period, is a "pathic" being. Its will still lacks the strength to master its emotional life. Because will, like thinking, is a function of the conscious I and matures only gradually to full leadership, the word "I" is not used until relatively late, usually in the fourth year of age.

Maturation is characterized by the gradual growth of the personal superstructure, ending in adulthood. Even then, however, the endothymeric ground and the personal superstructure do not always show that equilibrium and interaction which render these two strata a functional whole. They may shift in accentuation; in daily life the influence of emotions and endothymeric impulses is sometimes greater and at times less than that of purposeful will.

Besides these common fluctuations, there are also particular states marked by a disruption of balance between the endothymeric ground and the personal superstructure. The phenomena of crowd psychology and dreaming are both characterized by the obliteration of logical thinking and responsible volition, entailing inroads of affects, drives, and passions.

The balance and interweaving between the endothymeric ground and the personal superstructure can also be disturbed in another respect, that is, when both these strata are separated from each other and lead a life of their own. This occurs when thinking refuses to take cognizance of the strivings and emotions "from below," and volition shows unwillingness to deal with these manifestations. They are then, one might say, repressed and bottled up in the unconscious. Nevertheless, they are experienced in consciousness as nervous unrest, insecurity, and inhibition, or as irritation and aggression against other people who may be used as scapegoats for one's shortcomings.

All this means that the *integration of personality* is not completed at a certain point; it poses a task which the individual must tackle in his own way. It is the mark of the mature personality that the wealth of endothymic life and the alertness of the personal superstructure interact, and that the individual strives for their interpenetration and balance.

SUMMARY

The concept of a hierarchy among the distinct mental processes and states has been briefly considered. Aspects of stratification theory, levels and functions, as well as personality development and integration were discussed.

XIII

**On the Stratification
of Personality**

THE LAST THREE DECADES have seen a personality theory evolving in Germany which, steadily gaining ground, may in time have a profound influence on psychology. Called *Schichtentheorie* (stratigraphic theory), it renders the holistic personality model of Gestalt psychology and Stern's psychophysically neutral model more definite by providing them with biologically grounded "strata."

Stratigraphic theory, initiated in the pre-Hitler years, has since grown to the status of an integral psychology. With the resumption of international psychological relations, non-German psychologists find themselves facing this far reaching, compact theory; and looking back to the many fruitful German contributions of theoretical schema, many of them keenly sense a need for an interpretation.

In this chapter I will try to sketch only briefly the background of stratigraphic psychology, already outlined elsewhere.¹⁶ Rather, emphasis will be on potentially significant implications for psychology in general and personality theory in particular.

**STRATIFIED AND HOMOGENOUS
PERSONALITY MODELS**

Differences between personality models stem from underlying ontological philosophy which may assume one homogenous mode of existence, or two or more heterogenous ones. The

oldest psychological model is found in the panpsychistic belief that all bodies have indwelling souls. This is indeed the earliest personality model in terms of a "strata integrate," involving the interaction between the strata of body and soul. The model of antiquity, in Aristotle's "bottom to top" interpretation, is triadic. The earliest layer of personality is *soma* (organic existence), from it emerges *psyche* (soul existence), superimposing itself on *soma*, and from the *psyche* emerges *nous* (intellectual existence), overlapping *psyche* and *soma* and controlling them.

The stratigraphic personality model of antiquity had to yield to a new one, suggesting the operation of a single homogenous mode of existence, the machine model. The animal model of personality, in keeping with Cartesian interpretation, was also conceived as a machine. Freud's model of the infant mind granted the existence of mind, but interpreted it deterministically and denied the emergence of new mind strata over and beyond the infant-mind. These models of the machine, the animal, and the infant-mind have been repudiated by Allport as uncongenial with the true nature of normal adult man.²

Pre-Lewinian Gestalt psychology arose from the protest against the theory which regarded the mind as a machine with only "point to point" arrangements. The model offered instead, most insistently by Kohler, is that of total dynamic self regulation, with the stress on "total."³ One may summarize by saying that the dialectics of model building have gone, so far, from the elementaristic extreme to the totalitarian extreme.

Stern's personality model, though ontologically defined as homogenous ("psychophysically neutral personality") is conceived as a 'hegemony of elements, events, phases, strata . . . integral to the totality.' His twofold principle of salience (cognition volition) and embedding (affection), seen in constant coexistence and succession, demonstrates his stratigraphic approach to personality. Thinking, in these terms, is 'both a transformation and a conqueror of the sphere of instinct and intuition, or, on another plane, both the a literary and confederate of feeling and emotion.'⁴

The concept of stratification emerges also in Lewin's and in

Goldstein's theories. Lewin sees the "individual psychical experiences, the actions and emotions, purposes, wishes and hopes . . . embedded in quite definite psychical structures, spheres of personality, and whole processes."²⁷ Goldstein furnishes evidence of stratified cognition in terms of the cortically controlled "abstract" and subcortically controlled "concrete attitudes."¹⁷ Allport, discerning in the mature personality a layer of newer, "higher," independent motives and a layer of older, "tissue-grounded" drives, aligns himself with stratification.^{1, 3}

Thus the model of stratified personality seems to be well represented in the theories of Lewin, Stern, and Goldstein, and at least implied by Allport. The actual impetus to the stratigraphic theory has come, however, from philosophical inquiries into existence, from phenomenological investigations, and especially from the scientific study of the brain.

THE BACKGROUND OF STRATIGRAPHIC THEORY

Philosophical and phenomenological background: Morgan³¹ and Hartmann¹⁰ regarded the world as a hierarchy of inorganic, organic, and mental strata of existence, each superimposed on the other in the stated order. The higher stratum, while carried by the lower, controls it to a certain extent. Each new stratum has its particular part to play while the older strata continue to function. The same law of stratification may be observed in the human being.

the mature personality, generally managed by the cognitive-volitional intentions. This finding implies a hierarchical stratification, not a mere juxtaposition, among intentions. Thus, a stratigraphic interpretation of personality is reached through the phenomenological approach involving the higher stratum of managing intentions and the lower stratum of managed intentions. In the following discussion of stratification theory the spatial simile "stratum" and its derivatives will be replaced whenever possible by the more adequate psychological term "intention." A personality interpretation in terms of a "strata hierarchy," preferably of "overlapping intentions," will be advanced.

Lersch, exploring personality phenomenologically, uses stratigraphic terms by calling the conative affective intention 'endothymic ground,' and the cognitive-volitional intention 'personal superstructure'.²⁸ He sees these overlapping intentions pervaded by the infra psychic "intention" of sheer living, in other words, by the vegetative intention, animating the whole personality, it begets the needs for activity, pleasure, libido, and stimulation in general. Phenomenological research showed that the orectic intention, sustained by the vital force of the vegetative intention, is centered on two themes. One is that of *being an individual*. It embraces the drive for self-preservation, the motive of self-enhancement (egoism), the desire for power, the need for social approval and self respect. The second theme is that of *transcending one's ego*, manifesting itself in the needs for social intercourse and benevolence, desire to produce cultivation of interests, spending of enthusiasm, conforming to precepts, and transcending of the self.²⁹ It seems to me that in addition to the themes suggested by Lersch, there is a third theme, that of *self-cultivation*, which is centered on the individual's total motivational pattern. The pursuit of these various needs under their respective themes causes a constant affective feedback and a stream of more permanent moods, informing the personality of the progress and final outcome of its conduct and of the general state of its vitality.

Psychoanalytic background: Freud's model of personality with its id-ego-super-ego interaction can also be considered a stratigraphic model. Stratification is entirely in keeping with psychoanalytic concepts of unconscious motives and ideas, in that the stratigraphic I-function, "uppermost" in the strata-hierarchy, is believed to have more or less consciousness of the cravings "from below."

Brain-physiological and morphological background: Brain-physiological research has established that the thalamus, hypothalamus, and related subcortical regions are connected with the emotional side of experience.^{5, 8, 11, 12, 49} Kraus introduced the terms "depth person" and "cortical person," a dichotomy which gives too radical an interpretation of the human being.²⁵ In the normal adult the depth person and the cortical person are, in Rothacker's famous illustration, like a horseback rider and his horse, each taking the lead alternately. At times, feeling confident, the rider gives the horse the reins; at other times he pulls the horse in and leads it.³⁶ Such experiments and experiences strongly suggest a bipolar structure of personality, and hold out promise for the study of psychic functions under the alternate preponderance of upper and lower strata.^{9, 18} While brain physiology came upon this theory by discovering the bipolar stratification of brain function, brain morphology arrived there by taking its lead from brain structure. Doubtless, the external structure of the brain, with the new brain towering over the old, is suggestive of the theory of stratification. Yet the latter approach must guard against the "phrenological" fallacy of encephalo-psychic parallelism, already exposed by Piéron.³⁴

Comparative psychological background: Werner's comparative studies of the child, primitive man, and abnormal primitive man provide a cumulative portrayal of the depth person.⁴⁸ The child and primitive man represent "man not yet under cognitive volitional control." The abnormal primitive man represents "mature man minus cognitive volitional control." These may

be taken as illustrating the genetically lowest state in stratigraphic interpretation

THEORIES OF PERSONALITY STRATIFICATION

Considering the broad scope of approaches to stratification, students of personality will find much plausibility in full fledged stratigraphic theories Jaensch,²² Kleist,²³ and Hoffmann²⁴ each suggested a triadic stratification of personality, in terms of the antique distinction between soma psyche, and nous

Rothacker has presented the most elaborate stratigraphic theory of personality.²⁵ His book, drawing on a wealth of corroborative literature, is replete with profound vistas and shrewd observations. Though he distinguishes explicitly between five layers of personality, his system can be reduced to a triadic version and compared to similar systems. The 'lowest' layers, really infra psychic, are described as catering to sheer vitality and to the vegetative stratum (nutrition circulation breathing and the lymphatic system). Carried by this stratum and generally controlling it in turn, is the animal layer (instincts drives, emotional effects of drives, urges, moods, and affects). Sustained by the animal layer and capable of managing it is the human or ectic layer, catering to emotions, higher motives, imagination, and dream content. Still 'higher,' carried 'from below' while controlling 'from above,' is the personal stratum ministering to habits, attitudes, and higher learning and serving the lower level cognitively.

Rothacker compares the different strata to relatively autonomous armies pursuing their routine tasks. Only when emergencies arise, or a concerted campaign has to be undertaken does the supreme commander, the I-function take action. The I-function is not another stratum but an agent of personality that at times mobilizing the strata for a concerted effort and attending to their doings with heightened awareness. While Rothacker dwells more on the depth person, Leckie and

cussed earlier, elaborates more on the mature personality. Their interpretations complement each other.

OUTLINE OF A PSYCHOLOGY FROM THE STRATIGRAPHIC STANDPOINT

THE STRATA INTEGRATE OF PERSONALITY

Development: Personality is an overlapping integrate of the interacting, vegetative, orectic (conative and affective), cognitive-volitional, and superconscious intentions. This integrate develops in the stated sequence through the emergence of new intention and through its superposition upon the old. Apart from this "development through superposition," a "development through growth" is attained within the intentions, which grow in scope and efficiency of functioning.

Somatic growth is the prerequisite of superposition. The infant first "lives out of the old brain," a stage involving the vegetative and the orectic-animalistic intentions. After the "new brain" matures (somatic growth), the cognitive-volitional intention emerges. It superimposes itself on the orectic-animalistic stratum (which, in turn, is superimposed on the vegetative intention). This law of superposition of new on old intentions involves, on the part of the old intention, a sustaining while being controlled. On the part of the new intention, it involves controlling while being sustained.

Once an intention has emerged, it unfolds through learning. The orectic intention unfolds a scope of conations and affections, involving an ever widening variety of valences. Similarly, the cognitive-volitional intention gains in knowledge and intellectual prowess. Learning affects not only the expansion of the different intentions, but also their interaction. Normally, a broadened influx is assumed by a correspondingly elaborate cognitive-volitional machinery.

How much the distinct intentions can profit by learning individually, or from their effectiveness in interaction, depends

on hereditary endowment and on the environmental opportunities of the developing individual. It must be assumed that the learning process involved in the functioning of the intentions and in their interaction leads at length to certain more or less stable brain organizations. It is in these terms that a measure of "embedding" of psychic life in brain structure is believed to exist.

As the fully developed intentions settle into smooth and flexible interplay, personality attains maturity. Under this condition, each distinct intention makes its peculiar contribution in varying degrees toward the adjustment of personality, as the situation requires. The intention most concerned with adjustment in a given situation is the figure process, while the other intentions are ground processes.

The interplay of intentions proceeds under varying degrees of awareness of the I-function, the hub of the strata integrate. Rothacker compares the strata integrate to an administrative agency where certain transactions may be handled by lower line organizations, without the staff organization exercising its commanding or coordinating function²⁸.

The distinct strata. After the exposition of the general framework of personality, the component parts may be examined. The vegetative intention, sustained by metabolism, pervades the whole strata integrate and generates the entire level of vitality. From this vitality stems the general need for activity and also the "vital mood," its affective reflection.

Overlapping the vegetative intention is the orectic intention, the earliest stage of which is the animal-orectic. This stage seeks immediate fulfillment of the vital drives by the use of available motor equipment. Its sensory experiences are keyed to the valences appropriate to vital need satisfaction. From the animal-orectic intention emerges the infantile-orectic one, which is directed to life preservation and to the need for comfort and activity and experience. The infant is susceptible only to gratification from valences serving these purposes, and to feelings of pleasure or displeasure at fulfillments or non fulfillments. In part . . . of

pathic perception upon sensation. At the same time, the affective impulse registers the emotional reactions intertwined with these autonomous strivings.

Finally, mind at the cognitive-volitional level, grounded mainly in the central lobes of the brain, manifests itself as rationalistic volition.^{13, 32} With respect to the cognitive impulse, mind appears as apperception, ideation, and thinking; and in terms of the affective impulse, it takes the form of intellectual emotion. Learning at this level comes by insight which itself is stratified. Insight through Gestalt-cognition, involving the solution of problems through closure of gaps perceived in *Gestalten*, is more concrete, nearer to seeing images in primitive cognition, and therefore "lower." *Noëtic* thinking is imageless, conceptual, and therefore "higher."²⁶ Imageless thinking was the research object of the Würzburg school (Külpe, Ach, Bühler, and others). It seems that present psychology, while fully won for Gestalt, neglects imageless, noëtic thinking. The stratigraphic interpretation of both as distinctive modes of thinking at different levels would assign to each its legitimate place.

Impulses: Sensation, viewed in vertical mobility, is stratified, with sensations of contact regarded as "lower" (subcortically controlled) and sensations of distance considered "higher" (cortically controlled). Even within the sensations of contact, a stratification may be discerned. Head discovered experimentally the genetically older, coarsely discriminating, and more affective protopathic sensations, and distinguished these from the younger, finely localized, but less affective epicritic cutaneous sensations.²⁰

The reproduction of past experiences is also stratified. Memory, stemming from material originally acquired by pathic perception, reveals the character of spontaneous orectic surging. Remembering, however, comes from content originally obtained by apperception and is reproduced for distinctly intellectual purposes, as for example, remembering something previously studied.⁴⁴

Goldstein and Scherer, exploring the total personality of brain injured and mentally deteriorated patients, discovered two "strata" of thinking, the concrete and the abstract.¹ Concrete thinking is not only stimulus-bound, but is also prone to kindle perceptions into action. It is in keeping with the sensory motor circle peculiar to orectic intention. By contrast, abstract thinking, produced exclusively under cognitive volitional intention, detects relations, and then forms them into concepts by focusing on certain attributes. This element of newness and creativity places abstract thinking 'higher' in the cognitive volitional stratum than concrete thinking.

Stratigraphic theory interprets volition as the functioning of the I. Phenomenological examination reveals distinct acts of the I favoring one course of action and rejecting another. The upsurge of needs from the orectic stratum pressing for undelayed relief, is impulsive, rhythmic, and fluent. Cognitive volitional action, by contrast, aiming at problem solving and delayed by directed reasoning, is propulsive, arrhythmic, and saltatory.² This capacity is sustained by the "new brain," capable of shunting psychophysical energy in desired directions toward practical realization.

Experimental investigation shows that the observational and the executive aspects of the I function are usually "rolled into one," but experimentally separable. Carefully organized reports from hashish inebriated subjects indicate what they experience as intoxication takes effect. They report initially an obliteration of freedom of action, and only later a breakdown of the I's observational function.^{3 4 5 6}

The observational function of the I is more or less consciously focused on the pursuit of needs. Two levels can be discerned. In keeping with Brentano's terminology, the object-centered awareness of everyday life, registering simply the actuality of given objects, will be designated as "primary awareness." A more complicated level, where the I enters as awareness plus awareness of awareness, will be named "secondary

awareness."¹⁰ The I can also rise to an even more involved awareness, which may be called "reflective," instead of merely passive, "secondary awareness."²⁶

Turning now to the executive aspect of the I-function, three interpretations may be distinguished: the I regarded as an arbiter, as the outcome of a dynamic situation, and as an executor. German stratification theorists seem to overstress the command functions of the I-point, making it an arbiter between conflicting and competing forces. According to Rothacker, the I "posits, establishes, and determines"; it "tames" the drives and desires (*Bändigung von triebhaften Funktionen*"); it is a formal, *a priori* force; that is, it can further restrain, or stop motives at will, "regardless of their content."³⁶ It seems that when Rothacker, and for that matter Lersch and other theorists, give their attention to the top of the strata hierarchy, they abandon the psychology that hitherto has guided them and drift into Kant's metaphysics of morals. Starting out to explain "will," they find themselves interpreting "good will."

American psychologists entertain a laissez-faire view of volition. To them the I-function is merely a dynamic situation, resulting from a resolved dynamic contest. There is, however, much evidence to challenge this approach. The now classic experimental research into the nature of will by Ach, Michotte, Lindworsky, and others, the earlier mentioned studies on experimental intoxication, and also common sense tend to refute the laissez-faire view of volition.^{23, 23}

Between the German authoritarian and the American laissez-faire views of volition, a third view may be discerned. It seems to this writer that the I-function is that of an executor of dynamic resultants, and not that of an arbiter among dynamic contestants. This executive function of the I has no force to modify dynamics by fiat. It is merely, to use Lindworsky's metaphor, a switchman throwing the switches and thereby clearing the track for scheduled trains. It cannot assume the duties of management and cancel trains. The executive aspect of the I-function has no power to arbitrate among motives

from moment to moment. It does, however, have the capacity to bring about a reconsideration of the motivational pattern. It can effect a transvaluation of values, and, as a consequence, change the motivational pattern indirectly. Apart from this occasional "revisionistic" function of the I, its role is "observational" and "executive."

The I-function may also have access to and consult with the superconscious intention, which is superimposed on the cognitive-volitional one. It does not seem appropriate to crown the strata hierarchy with a rationalistic layer, as the German stratification theorists do. Beyond this, the basic law of strata emergence produces an intention higher than cognition-volition, namely, the superconscious stratum, an inevitable conclusion arising from the very concept of stratification.

Action: The direct effect of the practical impulses of the mind may be action. At the vegetative level action is closely connected with sensation in the sensory-motor circle. Reflex action, which is self-regulatory, is patterned on this sequence. Instinctive action, maintaining animal life, like reflex action at the subcortical level, shares this stereotyped, self-regulatory character. While each specific reflex action functions momentarily for some life-preserving purpose, any specific instinctive action lasts until its underlying vital need is filled.

Action at the orectic level is predominantly playful. Such action is typical of childhood, but occurs also in adulthood in times of playful moods, of strolling, "celebrating," conviviality, and erotic contacts. Behavior such as advancing and withdrawing, battering, displaying and expanding oneself, cringing to others, etc., is orectically controlled.³⁸ By contrast, all planned and scheduled activity is cognitive-volitionally guided. In these cases the directing I-function can leave details in planning to the unsystematic, groping playful behavior style of orectic intentionality. (In this context it might also be added that one of the most significant stratigraphic interpretations of behavior is Storch's study of the capacity for orientation at lower levels of organization.)⁴³

ABNORMAL STRATA SYNDROMES

Continuous shifts of emphasis among the strata, as a consequence of the individual's adaptations to life, are both natural and necessary.²⁶ If this vertical mobility, however, is distorted or disturbed, syndromes of the strata integrate may develop, and maladjustments or mental illness ensue. The following brief sketch is suggestive of the stratigraphic approach to abnormal psychology and to the psychology of personality in general.

When the cortex and the cognitive-volitional intention mature in childhood, a critical juncture is achieved. The child may shrink from this "taskmaster," preferring instead to linger in the playful atmosphere of "orectic life." This is the syndrome of stratum fixation. A child intoxicated by the masterful aspect of volition, however, may break away too vehemently from the dream world of orexis, showing the syndrome of stratum precipitation.

When, as a consequence of frustration, the I-function breaks down, the individual may return to primitive, imagomotoric acting peculiar to the orectic level. This process constitutes stratum regression. Lersch interprets crowd behavior as a phenomenon of stratum regression. He also conceives of dreaming, resulting from relaxed vigilance of the I-function, as a mode of this syndrome.²⁶ Frustration-born suspension of cognitive-volitional control over orexis may permit the orectic surging to invade the vegetative area, producing psychosomatic disturbances if the innervation goes via the autonomic nervous system. If, however, the innervation is via the central nervous system, hysterical symptoms may result.

When a motivational change is in the making (which occurs, of course, predominantly at the orectic level), but the cognitive-volitional stratum is slow in assuming its executive part or is lacking the behavior patterns appropriate to the change, there will be an interstrata discrepancy. The strata integrate suffers a dissociation if the normal interaction and the intercommunication among the strata are suspended; this is par-

ticularly so when the orectic upsurge is not meaningfully handled by the cognitive-volitional intention under the direction of the I-function. When this master sequence is severed, or grossly disturbed, the syndrome of schizophrenia will probably occur (interstrata dissociation) ^{41 42}

Syndromes of the total strata integrate may arise from abnormal excess or deficiency of vitality, or from toxic or infectious organic conditions stemming from the vegetative area and having repercussions at the orectic and cognitive-volitional levels ^{21 38 39}. Abnormal development confined to a single stratum may be designated as intrastrata syndrome. Thus, within the orectic intention, maladjustments may stem from a lack of motivational consistency in development from childhood to adulthood. This is the problem which Benedict exemplified by the discord between the "chrysanthemum stage" of the Japanese child and the "sword stage" of the adult.⁴ Ultimately, within the adult motivational pattern, motives may be pitted against one another in frustrating conflict.

STRATIGRAPHIC PERSONALITY ANALYSIS

assuming that this will indicate the stratum preponderance prevailing at the moment. Rothacker adduces evidence for this hypothesis from Buytendijk's time studies of motion pictures.³⁶

German characterology: Lersch's work, the representative stratigraphic psychology of personality, deals exhaustively with the common motives and emotions above the infantile level and their "personal superstructure."²⁶ He analyzes the general psychodynamic interrelations among the motives and their emotional effects, and probes into the complications and individual differences at the cognitive-volitional level (his "personal superstructure"). Lersch's interpretations, however, do not fall into the behavioral concept of personality. Rather, they appear to be closer to the functional approach, regarding personality as purposive; that is, it is prompted by personal motives in accomplishing the common themes of human life.¹⁴ The situational, environmental, and cultural determinants and, consequently, the attitudinal schema of personality are not considered in Lersch's volume.

Wellek's psychology of personality with its system of polar dimensions at different strata levels, can render good service to psychodiagnostic interpretation.⁴⁵ He proposes, first, to study the core of personality in terms of its coherence of attitudes (the "radial" aspect of stratification); and then to examine the scope, the clustering, and the weighing of the polar dimensions at their different levels (the "horizontal" level of stratification). Wellek's personality exploration is idiographic. When he proposes, however, to describe impressionistically the total quality and the calibre of personality by using similarities, he tends toward an impressionistic typology. It would be preferable to keep the idiographic and typological approaches apart.

A rationale for idiographic interpretation: For the development of an idiographic, stratigraphic personality analysis, there must first be an investigation of the broad framework, guided by such questions as: What is the dominant style of an individual's strata interaction? Under what style of I-control is his dynamic stream handled cognitively and volitionally in the basic

situations of his present life? What particular need complexes are processed cognitively and volitionally under full I-control? Under what circumstances does the dynamic stream show a drifting, impulsive tendency under semi-awareness of the I? Does the strata integrate as a whole discharge its functions in accordance with the strata constellation earlier described as harmonious? If not, what are the deviations? Do these deviations amount to abnormal strata syndromes?

The analysis can then proceed to details of the distinctive strata. It could appraise the rate of vitality ("biotoons") and its bearing on the entire strata integrate. It could analyze the motivational pattern of the orectic intention, including the self-cultivation motive. It could further analyze the cognitive-volitional intention embracing cognition (conceptualization, sensation, perception, ideation, remembering, ideational imagination, language;²⁸ intelligence and intellectuality). Similarly it could probe into volition (peculiarities in mobilizing psychophysical energy for need-pursuit, awareness of the dynamic scene, committing of needs to cognition, characteristics of action, voluntary and automatized; thwarted action).

Stratigraphic types: A stratigraphic typology, like all typologies accepting scientific standards, has its merits, but also shares the superficiality of this approach. Lersch suggests the emotional, the moody, and the driven types as three modes of orectic preponderance.²⁹ He further adds the volitional type prevalent in European-American culture. This typology needs completion "downwards and upwards." An overemphasis on the vegetative stratum suggests the establishment of a somatopathic type, which may or may not entail psychopathy. Thus subtypes of somatic asthenia without psychopathy and of somatic asthenia with psychopathy can be distinguished.³⁰ The completion of stratigraphic typology "upward" calls for investigation of the "religious" attitude as an expression of the superconscious intention.

Stratigraphic factor types: What can factor analysis contribute to stratification theory? An examination of Eysenck's research into the dimensions of personality³¹ suggests a possible con-

fertilization between factor analysis and stratification. Eysenck, who, I believe, undertook his study without any stratigraphic preconceptions, nevertheless arrived at results well in keeping with some stratigraphic types. His higher order "type" of neuroticism implies a range between the polar extremes of good and poor personality organization. This type supports the construct of "interstrata discrepancy," and gains still greater significance for stratigraphic interpretation when subdivided by Eysenck into the alternative factors of dysthymia and hysteria. The stratigraphic interpretation of neuroticism does indeed suggest two contrasting strata constellations, one with greater emphasis on the cognitive-volitional stratum (corresponding to Eysenck's dysthymia) and the other stressing the vegetative stratum (in keeping with Eysenck's hysteric type).

German stratification theorists might take a cue from research such as Eysenck's. In turn, factor analysis could profit from probing into the "metaphysical reality" of the strata constructs. To be sure, arrangement of correlational matrices would have to be guided by the theory of personality stratification. Phenomenological research, brain physiology, brain anatomy, and brain pathology, as well as genetic and comparative psychology, lend considerable plausibility to the existence of stratigraphic factors.

STRATIGRAPHIC THEORY

PROMISE OF AN INTEGRAL PSYCHOLOGY

Stratigraphic theory coordinates the great thoughts of all "schools" that have evolved since the advent of scientific psychology. Phenomenology, an elaboration of introspectionism, detects the intentions (strata) of personality. Functionalism is formally embedded in stratification through interpretation of personality as an adjustment process. General-behavior and individual-behavior concepts of personality are combined in a functional-behavioral approach. The psychoanalytic dichotomy between the conative level of the id and the super-ego, and the

cognitive-volitional level of the ego, is also geared to the stratigraphic model of personality. Behaviorism has contributed to stratigraphic studies of overt behavior. Finally, Gestalt theory can be considered a direct ancestor of stratification, stressing as it does a holistic concept of personality. However, this is qualified by the assumption of distinctive strata, which usually maintain the figure-ground relationship when one stratum is preponderant over another. Strata are "fields" distinguished by the particular reigning intention.

Having advanced the promise of an integral psychology, German stratification theory has been rather slow in undertaking detailed research or in developing psychodiagnostic techniques, either to buttress theory or to enhance clinical applications. Apart from this lag, which is understandable in view of the comprehensive scope of the theory, another possible danger is apparent from Wellek's review of stratigraphic theories.⁴³ He describes a new trend which completely abandons the biologic (encephalic) ground of stratification by "liquifying" personality and resolving it into a process.⁴⁴ Even if in a healthy normal person the strata integrate is so closely interacting that an individual "field" prevails, it still remains true that each stratum rests largely on its own encephalic foundation. The mind, though recognized as an integral (cognitive-affective-practical) tool, functions rather distinctly at the subcortical or cortical levels. Such reservations should also be considered in studying Thomae's argument.⁴⁵

In conclusion it seems appropriate to suggest tentatively a definition of personality in terms of the stratigraphic model. Such a definition should reflect the integral character of stratigraphic psychology and indicate how the common themes of human life are implemented in a given personality through individually unique strata interaction. With these requirements in mind, stratification theorists would do well to paraphrase Allport's definition: "Personality is the integrate within the individual of the cognitive-volitional and the superconscious intentions, superimposed upon and ministering to the wants of the subordinate vegetative and the orectic intentions that determine his unique pursuit of the

common theme pattern of human life, all occurring within his peculiar cultural-situational environment."¹

SUMMARY

The theory of personality stratification, which since the 1930's has largely dominated German psychology, offers the long range promise of an integral psychology. The stratigraphic model is biologically grounded in brain anatomy and physiology. Stratification theory combines the developmental principles of continuity and discontinuity by means of the dual process of growth (continuity), and emergence and superposition of new strata upon the old (discontinuity). The mature personality is interpreted in terms of an integrate of overlapping, interacting, distinctive intentions (strata), which are ministered to by an integral mind, manifesting itself through cognitive-affective-practical impulses.

The theory of personality stratification was traced from early Greek models to the present era of scientific psychology, with a consideration of ontological philosophy, phenomenology, brain physiology and morphology, psychoanalysis, and comparative psychology. The extent to which stratification theory tends to incorporate or coordinate psychological systems and schools was indicated. Stratigraphic psychology was outlined in terms of development, strata, levels, impulses, action, and abnormal strata syndromes. The role of volition, neglected in American psychology and overemphasized in German stratification theory, was reconsidered. Methods and problems of stratigraphic personality analysis and research were discussed, including types, factors, and diagnostics. A definition of personality in stratigraphic terms concluded the chapter.

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XIV

**Problems of
Character Change**

THE CONCEPT of "change" seems to be used rather infrequently in personality theory research. A survey of the indices of the post-war *Psychological Abstracts* showed about fifteen papers in this area. Most of the articles were concerned with personality changes following lobotomy,^{11, 16} or adjustment problems of handicapped veterans,¹⁷ or changes occurring during or after psychotherapy^{3, 21} or case work.¹⁴ Generally, these papers were published by psychiatrists and social workers, with psychologists rarely represented.

It would require a whole history of psychology to discuss adequately the reasons for the lack of more extensive research in the field of character change. Two very strong trends in modern psychology appear to have impeded progress. The constitutional or typological approach (Kretschmer, Jaensch, Pfahler) stressed the immutability of personality and regarded traits or dispositions as given, and only very slightly modifiable entities. The behaviorists, on the other hand, did not consider character change a matter for scientific psychology. Traits and personality characteristics were believed to be the results of conditioning. Since this process was deemed to continue during an individual's entire life, there was nothing to be changed, unless, of course, change was defined as the transition from one conditioned be-

havioral pattern to another one arising out of the very next life situation

In this chapter I shall try to consider some concepts and methods for the study of problems in character change, and to present the preliminary results of a research program. The varied terms will be defined, the relationship between character and personality discussed, and a differentiation made between character change and changes observed in learning, attitudes adjustment, etc.

DEFINITIONS

There will always be some disagreement about what is meant by character and by personality. Many writers have used both terms synonymously. It is my opinion, however, that personality includes more than character. Character may be defined as the structural aspect of personality, the inner conditions of overt behavior that are, to a certain extent, constant. In this manner character represents personality traits, sets, attitudes, etc. The term "change," relative to character or personality, describes the difference observed between two or more stages of the same process. Character change would denote the difference between the shape or quality of two or more stages of a process called "character." Since character was just defined as the system of structural aspects of personality, there appears to be a contradiction. This may be removed, however, if the hypothesis of Heiss¹⁰ and others²⁴ is adopted, namely, that character as well as personality, actual behavior and structural aspects of behavior, are both processes, but processes of different speeds. Character is a very slow process and behavior a very fast process. Personality consists of a series of processes of different speeds of change. The relationship between character change and personality processes, like learning, adjustment, maturation, and development, may be considered in a similar vein. In a sense 'change' deals with all these processes, but learning and adjustment, etc., are

processes of a more accelerated type; character change generally refers to a longer time period.

There is still the problem, however, of a distinction between character change and attitude change. No definite difference in time dimension is readily apparent since both are processes of a slower type. Attitude change, however, refers to a more specialized behavioral system than does character change. Whereas changes in attitudes and in learning may be measured by quantitative means, the assessment of character changes has remained on a fairly descriptive or qualitative level.

EVALUATION OF RESEARCH METHODS

Another major problem concerns methods of research in character change. If character change is defined as the difference between two stages or qualities, it cannot be traced without examining a certain sample of personality processes, or life histories. The biography or case history method and the longitudinal study are among the most important tools. Those who object that the use of biographical material in psychological research will lead to a further spread of subjectivity may note that the efforts of Allport,² Beck,⁴ Dollard,⁹ and others²⁵ have produced ways and means of analysis that compare favorably with the codification of experimental psychological research data initiated by Fechner and Wundt.

A brief review of the principles involved in the analysis of life history data indicates that a great deal of effort is devoted (a) to control the conditions that may influence any reports prepared for a psychological biography; (b) to minimize the degree of self-involvement in recording a case history, particularly in clinical situations; (c) to emphasize the concrete elements of all data to be included; and (d) to insure completeness. When the obvious need for accuracy, or *Gestaltprägnanz*, is added to these principles, the writing of a psychological biography becomes a matter almost as much controlled by general rules as any experi-

mental or test situation. Where these principles are followed, character change can be traced in actual life situations. This affords an opportunity to study the dimensions or channels of character change.

In contrast to the life history method, the repeated administration of a test assumes a prior knowledge of these dimensions or channels. It must be noted, however, that the use of biography as a psychological method should not obviate experimental or testing techniques in character change research. The longitudinal studies of children and adolescents in the United States, initiated in the late nineteen twenties, show the way an objective evaluation of character change may be executed. If the individuals studied at Berkeley¹² or at the Fels Institute²² were to be followed into their forties or fifties, and if methods of character evaluation could be improved, there would be sufficient material on hand to give everyone interested an opportunity to investigate personality change.

CHANNELS OF CHARACTER CHANGE

A continuation of the work initiated nearly thirty years ago in the United States would indeed be very valuable if methods of character evaluation could be improved. As commendable as these longitudinal studies were, it seems very doubtful today whether this material would yield information concerning more than certain aspects of personality adjustment, changes in sociability or introversion, or intellectual capacity and motor performance. What needs to be known in dealing with problems of character change is whether objectivity (in the sense of reducing emotionality, *Versachlichung*), is a general trend in personality development beyond the late twenties. It would be important to note how objectivity turns into sterility, activity into overactivity and restlessness, caution into carefulness, intensity of emotional life to extensity, or vice versa. It would also be very interesting to study transitions in mental states and behavior, from being sensitive to sentimental, from adherence to principles to stubbornness, from disappointment to exasperation, from being

clever to shrewd, etc. Similarly, it would be important to observe how an aggressive person changes or adopts other techniques, such as evasiveness or devotion, or achieves a general adjustment by imitation.²⁴

In a comprehensive study of character change, fixation or variation in personality themes would have to be investigated, including modifications of an individual's orientation toward his life situation. There are both differences in degree and in quality of orientation to life.^{5, 24} For example, during his life man becomes more or less oriented toward the fact that at some time he must die. This often produces a very slow but complete and deep change in all character dimensions. The dynamics of the integration of death awareness and the isolation of this awareness within the inner life history of an individual are part of the many aspects of character change which must be studied, unassisted by the generally approved tools of scientific psychology.

There are also, at present, no generally accepted means of investigating the manner and dynamics in which intense emotions "fade out" while associated personality themes remain. Interviews or personal documents appear to be the only way of tracing this "fading" process. The same holds true for problems of maturation, a process correlated with character change not only in adolescence but in adult life and old age as well.¹⁸ It is not a disregard of facts and figures which instigates the search for new scientific techniques in this field. Rather, it is a realization of facts which figures somehow seem incapable of expressing. These facts should not be eliminated or disregarded as many scientifically minded workers tend to do. They should be traced, comprehended, and studied, whatever the conditions may be. Objectivity, shifts in orientation with regard to a given life situation, variations in personality themes and techniques in living, variations in intensity or apathy in emotion and feeling, variations in readiness to respond, in control of behavior, in intro- or extraversion, in identification with others, and changes in values, etc.; all these are only some of the channels within which character change occurs. Not much is known about these channels, at

present, and not a great deal more will be learned without intensive use of the experience gained in clinical work and the further procurement by field workers of material from real life situations

As in many other fields of psychology, a start must be made from the very beginning if there is to be real progress in character change research. At first, a great deal of phenomenological work will be necessary. All forms of transitions or character changes happening in real life situations will have to be investigated. Then experimental or testing situations must be devised to trace changes. If these prove adequate, longitudinal studies can be initiated on a more advanced plane. In addition, other problems could be studied, such as the significance of internal and external stimulation toward change, means of predicting time and direction of character change, etc.

OUTLINE OF CURRENT RESEARCH

As has already been noted, the use of biographical and non experimental techniques in psychology does not lead to greater subjectivity or rejection of experimental or testing methods. What must be insisted on in scientific psychology today, however, is the utilization of any tool whose conditions can be controlled and which affords an opportunity to gain greater knowledge about the process called personality and/or character. The following research projects, conducted under my direction may serve as examples.

LONGITUDINAL STUDIES OF CHILDREN

A longitudinal study of 4000 German children in six different centers (Frankfurt, Nurnberg, Stuttgart, Bonn, Remscheid, and a rural district near Cologne) has been initiated by a team of pediatricians, psychologists, and social workers. About 400 children are examined with a fairly complete battery of projective and nonprojective techniques. Once a year a limited number of

personality and intelligence tests are administered to the whole group of 4000 children. In addition, the teachers complete a questionnaire for each child, dealing with adjustment to school and social life. This study is by no means on as advanced a plane as was considered desirable above. On the other hand, Dalton's criticism that the Berkeley and Fels studies were simply gathering data without any real hypothesis or direction is not applicable to our studies.⁸ The aim of each of the annual psychological evaluations, interviews, and clinical examinations is to provide a qualitative assessment of each child's personality along the following dimensions: (a) activity or overt behavior, (b) dominant mood or temperament, (c) readiness for response in general, (d) readiness for emotional response, (e) adaptation to the current situation, (f) control of behavior, (g) form and degree of differentiation.

The child's behavior on each of these dimensions may be indicated on a specially constructed nine point rating scale.⁷ For instance, "Activity" may be rated as follows: very inactive; inactive (*antriebslahm*); rarely active (*antriebsschwach*); inhibited (*antriebsgehemmt*); fairly active; active; very active; over-active; and restless (*untrieb*). "Readiness for emotional response" may be rated: dull; unresponsive; slowly responsive; responsive in some relationships; superficially responsive; responsive to an average degree; impressionable; very responsive; and extremely responsive without any emotional stability. By rating the child's behavior on each scale, an annual "personality profile" or "general impression" is obtained. Comparison of individual profiles from year to year reveals the dimensions showing the greatest or the least amount of change. For instance, "activity" seems to be more stable than "mood." The results obtained will test some of the statements frequently made in developmental psychology and will contribute to character change research if the study can be continued for ten or more years. The contributions will be limited, however, because no genetic information has been obtained, only signs and symptoms of possible changes.

COMMON EXPERIENCES AND VARIED EFFECTS

A second group of studies consists of a systematic collection of biographies from persons of different backgrounds by specially trained field workers. Included are the life histories of individuals with very well defined religious and child rearing attitudes, case studies of former members of the *Wanderzögel*, a German youth group founded in 1901, studies of the readjustment of German refugees from the period 1945/46, and observations of former long term prisoners of war following their return to freedom. The main criterion for selection in this project was that all individuals studied shared an important experience, the effects of which could be traced. Field research has only begun, it is already apparent, however, that objectivity (reduction of emotionality) is not merely a quantitative problem.²⁴ At times very intense and "excited" feelings with quite a range of influence (for example, feelings and ideals about self-education and self-government for youth) have to go "underground," not because of a "super-ego's" censorship, but due to changes in the whole orientation toward life. Often this results in processes similar to sublimation. At other times it may cause feelings of guilt and uneasiness in the new attitude of facing reality and readiness for adjustment to life, regardless of conditions. Sometimes a person

may be of interest. All the men shared a common experience, which resulted in a similar reaction pattern although individual reactions during imprisonment and afterward were very different. What is particularly noteworthy is how the "after-effect" of the experience is fading, or retained, or "paralyzed," according to the given dynamics of the field. The dynamics of "paralysis" or retention of traumatic experiences which play such an important role in psychoanalytic personality theory may perhaps be similarly studied in adults.

ADULT PERSONALITY DEVELOPMENT

A third group of studies concerns problems of character change relative to adult personality development. Bühler⁸ and, more recently, Moers¹⁵ have reported excellent work in this field. Scharmann, using both sociological statistics and biographical analyses, showed that the period between thirty and forty years of age is no longer a time of complete satisfaction and success, but also one of serious breakdown and very rapid changes.¹⁹ This is somewhat similar to Stern's views in his book on the beginning of the aging process.²³ He stressed that in this period the awareness of the reality factors in an individual's life situation and the consequent danger of breakdown and crisis becomes stronger and stronger. On the other hand, Scharmann's statistics on the number of people holding leading positions in business, industry, the arts, and sciences also indicate that the years between thirty and forty are not only a time of initial success but also one of broadening horizons and increasing internal and external security. The contradiction between these two observations could be multiplied if a representative sample of psychologically useful biographies in these age groups were available. The reason for the contradictions may be found in the nature of adult personality development.

The studies of Bühler and Moers were influenced by what they considered a very definite and specific development. The process of personality formation and change, they believed, could be observed in a sequence of stages or periods of fairly well

defined shape and length. This model of development is already somewhat inappropriate for child psychology, although the physiological processes related to childhood and adolescence have some influence on the "timing" of psychological events at this age. In adult life, however, physiological influences are not nearly as strong as are social background, personal history, or the manner in which the individual identifies himself with a family, job, company, or political party. Consequently, an individual's life history no longer seems like a sequence of different formal structures but more of a history with a theme and variations. Since there are quite a number of possible themes, each with numerous possible variations, attempts to press the variety of personality changes during adult life into three or four "stages" or "periods" become tasks of dubious value. The history of an individual's identifications, certainly an important aspect of character change research, indicates not only the difficulties inherent in attempts to transfer the "stage theory" or "phase theory" of development from biology or child psychology to the psychology of adult life. It reflects also the social nature of every personality process, *including character change*.

FAMILY STUDIES

Another group of field studies was initiated in 1950 by the Psychology Department of Bonn University. The personal and socio-economic histories of families in Germany before, during, and after the war were studied. Those who believe that longitudinal studies of family life do not properly belong to the topic here discussed may be reminded that, according to Lewis' most impressive paper, only families form a satisfactory unit for a descriptive and comparative investigation of a culture, as well as the behavior of human beings in general.¹⁸ Lewis stresses that an individual's behavior may be understood only if viewed within the context of the primary group in which he lives, that is, the family. What is shown in these psychological investigations of German families, which should not be mistaken for the sociological studies of Thurnwald¹⁹ and Schelsky,²⁰ is that each family

has its own internal and external history. It experiences changes in formal structure and thematic order, changes produced by the adjustment of the whole family to a new life situation or by a shift in the degree to which one of the dominant members of the family identifies himself with the whole or a part of the family. There are periods common to all families, especially those resulting from adjustment of wife and husband to each other at the beginning, or from the different ways in which a member accepts a new role (e.g., as mother, father, older sibling, etc.). There are also psychological processes in family life, which are somehow unique to this special family pattern, the historical and personal background, and the changes one of the family members may be experiencing.

CONCLUSIONS

After discussing some of the problems connected with research on character change it may be desirable to note several practical and theoretical considerations.

The practical importance of character change research lies in the contributions it can make to the problem of predicting behavior. I agree wholeheartedly with any psychologist who believes that the value of psychology can be tested only by its predictive power. While the number of successful predictions in British and American psychological practice is unknown to me, it is probably rather high. It is also fairly high in our clinical work although opportunities for both research and testing are somewhat limited. There are probably several reasons for predictive failures in clinical psychology but one of the most important is the unknown quality of character change. Thus, one practical aim of research is to define the role of character change to the greatest possible extent, and thereby make psychological diagnoses even more powerful predictors than they are at present.

A dangerous scientific illusion would be fostered if it were inferred that it would be possible at times to predict any kind

of human behavior for any kind of situation. This is not an indication of scientific defeatism but rather a consequence of theoretical considerations inherent in character change research. In Ach's famous experiment with the *Vorhersage Methode* (method of prediction) the subject had the impression of making a decision in a completely free and arbitrary setting, although a prior prediction had been made by the experimenter.¹ In the process of character change the subject very often experiences something like a force driving him to new and unknown ways of dealing with things, (as is shown in some of our case histories). Even if everything were considered, it would not be possible to predict all the improvisations which compensate for this situation, and the attitudes and techniques of life developing from them. Not very much is known at present about the dynamic foundations of character change. Sometimes it may be a consequence of conditioning; more often it seems to be a result of processes Murphy called "canalization." In some instances, however, it may be the manifestation of "improvisations," that is, the transition of unstructured, unspecialized activity into a structured, specialized, adjusted form. Insofar as character change is a result of improvisation it cannot be predicted with sufficient accuracy.²⁴

SUMMARY

Personality consists of a variety of processes. Character is a structural component of personality, operating at a slow speed, actual behavior is a process of a faster type. Character change represents the differences between two or more stages of a process called character. The psychological biography, case history, and longitudinal study are the most important methods for character change research.

Preliminary results from research studies indicate that some of the dimensions or channels in which character change occurs are: objectivity, quantitative and qualitative modifications in an

individual's orientation toward his life situation, variations in personality themes and techniques of living, intensity and extensity of emotional life, etc. Only a phenomenological research approach can trace this variety of dimensions.

Three of our research projects, which attempt to follow the theoretical and methodological approaches to character change, were reported. They were (a) a longitudinal study of 4000 German children, combining interview, testing, and observational methods; (b) a systematic collection of psychological biographies of individuals with clearly defined backgrounds (religious, liberal, socialist, *Wandervögel*, prisoners of war, etc.) by specially trained field workers; and (c) statistical and biographical research on the changes in adult behavior between the ages of twenty to fifty.

Character change research will contribute to improved prediction of human behavior, but will also indicate the limitations inherent in attempts to predict such behavior.

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Part IV

Methodology

Projection and Personality

PROJECTIVE TECHNIQUES, both as a source of hypotheses and as a means of experimental investigation, are handmaidens to the continued evolution of personality theory. In this chapter I will attempt to consider briefly some of the implications for personality theory and for projective psychology of variables and norms in the analysis of thematic test material.* I shall review the concept of projection and, with the aid of clinical examples from the Four Picture Test (FPT), try to demonstrate the importance of evaluating stimulus interpretation, theme content, and the subject's expressive style. Particular emphasis will be on methods of quantifying qualitative data; diagnostic indications of immaturity; and studies of "themes of contrast," ambivalent attitudes expressing man's essential ambiguity, in the light of an existential philosophy.

PROJECTION

The recent history of projection clearly indicates that this concept has not maintained the connotation Freud gave it: in

* The research on projective tests, which I have been conducting over the past several years, is as much the work of my students as it is mine. I wish to mention here particularly my two research-fellows, R. H. Horvick and A. C. Rümke, to whom I am much indebted.

1894. Freud himself did not adhere to the original meaning of this *terminus technicus*, and in connection with the so-called projective tests, its scope has widened more and more. In previous publications I pleaded for a very strict and limited use of the term,³⁻⁶ but I feel that one cannot turn back the clock: *verba valent usu*. However, I would like to keep my earlier distinction between projection and expression, and while I am very much in agreement with Bellak's differentiation of projective, expressive, and adaptive behavior,¹ I do not fully agree with his elaborations.

It seems to me that the most promising way of theorizing on the concept of projection is to start from the affective relationship between the subject and his world. A too intellectual cleavage between subject and object, a heritage from Descartes, conceals the fundamental connection which always exists between both terms. The new existential philosophy must be credited for having again emphasized that the human being is always in a "situation" and that the subject-object cleavage is not a basic existential fact.^{10, 11}

Although problems about the subject-object relationship are very much of an epistemological nature, the psychology of projection is also concerned with this dichotomy.

Even in the most personal and individualistically organized "world," some aspects are always determined by the meaning of this world itself. In the most "objective" and adequate construction there is always a personal meaning, even if this does not come into the open in the verbalization of the subject. It will always be very difficult, if not impossible, to decide which part belongs exactly to the subject and which part is determined by the object. The Belgian philosopher De Waelhens deals with this difficulty from the epistemological point of view.¹¹

The varied phenomena which in the recent literature have been called projection may be grouped into a schema, consisting, in an oversimplified way, of two principles and two subdivisions:

1. The world divided into human beings and things; and

2. Experiencing the world either in accord with one's feelings and emotions, or as a threatening counter-partner.

Within this schema four different kinds of projection may be distinguished.

Projection A: Objects, things, landscapes, etc., which either are or are not in accord with one's feelings and emotions. For example, I am depressed and walk along the shore of a lake. The day is not particularly bright; there are clouds and the sun is not shining. I experience the landscape and the lake as sad and dreary. Or, I am depressed, but the day is brilliant with the shining sun. I experience this landscape as too brilliant, and as something unnatural and unpleasant. Projection A is also apparent in the Rorschach responses of a depressed gardener who sees dead rotten leaves on all the cards.

Projection B: Objects, things, landscapes, etc., which become the counter-partners of one's mood (and very often appear threatening). Here the complementary affect is always in evidence. (This is not to be confused with the affect correlate, e.g., being hungry and then noticing bread first among several other things). Projection B is a sort of animism, whereby human motives are attributed to the inanimate world; for example, the child who strikes the table because it hurt him.

Projections C and D deal with the world of our fellow men. Why do we make a distinction between things and men? Because, even though things have objective qualities and a meaning ascribed to them by society, they have no personal frame of reference which organizes their outer world in a specific way. They have no subjectivity in the real sense of the word. It is rather different to meet an object than a subject. I cannot organize a person in my world without making him an object, or without instrumentalizing him. Therefore, in real life, projection in the sense of A and B, or C and D, can be successful only if I refrain from attempting any real communication.

Generally, I am immediately aware of subjectivity as soon as another person looks at me. Being "looked at" represents an

appeal to true communication or to becoming aware of the possibility of being instrumentalized. Since, however, figures on projective techniques do not really look at me, and since I cannot communicate with them, they provide excellent material for projection.

Projection C: Human beings who either are or are not experienced in accord with one's moods and feelings. Most of the projections elicited by such tests as the TAT, FPT, MAPS, etc., fall into this category. The schema is: I am anxious and I think another human being is anxious too; or, I am happy and I think the other is happy too.

Projection D: Human beings who are experienced as the counter-partners of one's needs, drives, and feelings. For example, I feel guilty and I think that another person condemns me. (Believing that the other person also feels guilty would be Projection C.) Projection D, as defense against a threat, is the typical defense mechanism of psychoanalysis.

Although there are various very complicated phenomena related to this kind of projection, it occurs in real life because another human being is a threat to my existence as long as I am not in true communication with him (love). The other person is one who in my world has his own frame of reference, who can see me in a way I shall never know myself, and who can organize his world with me as an object. For these reasons alone he becomes a threat. However, Projection D, in the pure psychoanalytic sense, is rather rare on projective tests. Seeing a figure on a picture is not a real encounter and cannot be threatening in the true sense of the word. Nevertheless, Projection D does occur in an indirect form if both the ego and the super-ego can be projected, but then, phenomenologically, it is something else.

The discussion of projection may be summarized by stating that Projection A occurs as often in reality as in projective tests; Projection B occurs mainly in reality but sometimes also on the Rorschach or the thematic tests; Projection C occurs in reality but particularly on thematic tests; and Projection D occurs es-

pecially in reality and on projective tests only if both ego and super-ego can be projected

THEMATIC TEST VARIABLES

In the so called thematic apperception tests three kinds of variables may be distinguished

Stimulus interpretation Since the varied thematic tests use different stimuli, content material is greatly determined by the peculiarities of the individual stimulus. Even slight alteration of a picture can produce quite different responses. The general tendency to consider unusual or rare answers as misinterpretation is, in my opinion, rather misleading. If pictures are purposely ambiguous, then a great variety of interpretations is to be expected. As a means of obtaining insight into the specific ways in which an individual constructs his world, this technique seems superior to the obscure semantic terminology which man utilizes for social communication. For example, although I perceive a landscape quite differently from the way my neighbor does, I usually do not express these differences in my language, and we both use the word "landscape" as if this notion covered our respective images. It is ridiculous to think (even operationally), that one of our images is the less a misinterpretation, the more it approximates the central tendency of the population. "Misinterpretation," *per se* occurs only if an unambiguous, clearly defined object (chair) is inappropriately interpreted (table).

Most of our subsequent discussion will be based on research with the Four Picture Test (FPT), a technique developed in 1930 and described elsewhere.^{4, 5} On this test the subject is asked to write a story combining and arranging, according to his own choice, four vaguely drawn pictures, portraying four states of existence, roughly classified as follows

- I—Being together with one other person
- II—Being personally alone
- III—Being socially alone
- IV—Being together with many others in the group

The figures in the pictures are vague and ambiguous, and all the cards are colored with the same "palette," on the assumption that this facilitates emotional unity and story construction. Although various instructions are possible, many years of experience have shown that the best administration is the written one. The subject inspects the pictures for one minute. They are then removed and he is asked to write his story without further direct observation. All the data to be reported here stem from written protocols.

As can be noted on the FPT, ambiguity is not the only way of revealing the personal aspects of the subjective world. The FPT pictures assume more than an individual quality; they mutually endow each other with meaning, the interpretation of which tends to reflect the personality of the story teller.

Differences in stimulus interpretation may center on one or more pictures, as for example, when Picture I is interpreted as the room of the hero, or as an office where the hero does his daily work, or as a police headquarters where the hero is summoned, etc. Or, the two persons in Picture I may be interpreted as the organizers of the tennis match represented in Picture IV. If the two pictures had not been presented together, it is rather unlikely that this interpretation would have been made.

Theoretically, interpretation of the stimulus could just as well have been listed under the category of themes, the next topic to be considered. For practical reasons, however, these two categories were kept separate.

temperature, eating, smoking, etc. Incidentally, almost all FPT variables are scored on a 0-1 continuum; that is, variables are scored whenever they occur.

In general, a theme is any part of the protocol content which can be isolated, has a satisfactorily high reliability of scoring, and occurs with significantly greater frequency in one well-defined group than in another. The psychological meaning of a theme, just as of every variable in a projective test, can sometimes be deduced intuitively, but generally only statistical comparison of contrasting groups affords a safe basis for interpretation.

In my opinion, no prediction of overt behavior can safely be derived from the face value evidence of a projective test protocol. Overt behavior always occurs in a social role, whereas on a written protocol, the writer-subject is supposed to express his more autistic imagination. Sometimes there is a direct relation between overt behavior and the autistic stream of thought, but this is not necessarily so. Perhaps it can be said that the less a certain part of the protocol content depends on the writer's social role, the greater the chance that it will also appear in overt behavior.

If, however, one is willing to accept the psychological meaning of themes in general, it may be hypothesized that they reflect the writer's preoccupation with either the field, or the function, or the subject with which the theme deals. It may indicate that this particular function or subject has for him (the writer) a problematic character. That this preoccupation also manifests itself in overt behavior is possible, sometimes even probable, but *how* it does so depends on the role played. Without any prior statistical investigation of the variables, the relationship is often only slightly discernible, if at all. This applies especially to those variables which are mostly a function of the personality (the hero), rather than some "object" of this function. A single such variable may show considerable variation content-wise. For example, a person's wish to get rid of his parents may express itself in stories where the parents die, or where the hero is going

to travel far from his home, etc. Neither of these themes necessarily corresponds with actual life circumstances. It makes sense, however, to investigate statistically whether the common denominator of either solution matches the tendency to withdraw from the parental environment, although the choice of the solution may also have something to do with the personality of the writer.

Another interesting variant may be noted in the so-called "themes of contrast," which will be discussed in greater detail later on.

Expressions: Under variables of expression we classify all those aspects of FPT protocols that are mainly concerned with the manner or style in which a story has been written. For example, not everybody writes in the commonly used past tense. Some subjects prefer considerable direct quotation, and others utilize certain archaic words or stilted phrases instead of more colloquial terms. Also, the frequency of the conjunction "but" tends to differentiate significantly between certain groups. The diagnostic value of style variables is at least as great as that of themes, and often more reliable, since they are very unconscious expressions. Their validity, intuitively expressed in Buffon's "*Le style c'est l'homme même*," is rather high.

PROJECTIVE NORMS

In building psychometric tests the establishment of norms is accepted as a necessary first step to facilitate the interpretation of results. In the case of projective techniques, however, normative data are seldom available. For example, some Rorschach experts interpret protocols regardless of the subject's age and sex. They seem to disregard the possibility that a certain response may occur more frequently in one age group than in another, or perhaps more commonly in males than in females, or vice versa.

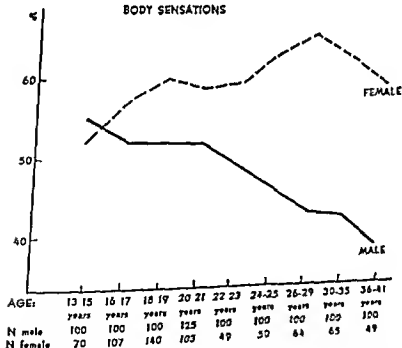
It has been our experience that FPT variables are extremely sensitive to age, sex, educational level, and cultural background.⁹

This, of course, complicates interpretation, but, on the other hand, variables sensitive to age can make very valuable diagnostic contributions. For instance, it may be concluded that a certain variable belongs to the FPT pattern of early teen agers, if it occurs with high frequency in the protocols of twelve year-olds, then decreases regularly with increasing age, and is noted only infrequently at about age thirty.

Before presenting some of our normative data it may be said that the scoring reliability of FPT variables has been quite satisfactory. Tetrachoric correlation coefficients between two scorers range from .86 for body sensations to 1.00 for indications of clock time.

Figure 1 presents the distribution of the variable "Body Sensations" among various age groups of high school level, tested at the Netherlands Foundation for Industrial Psychology.

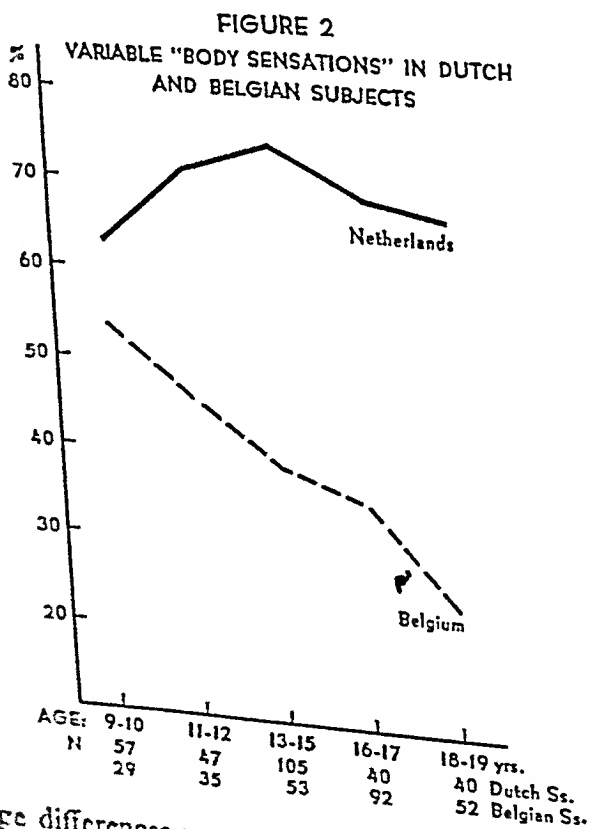
FIGURE 1
BODY SENSATIONS



It is evident from the graph that in our population female subjects behave quite differently from males on this FPT vari-

able. Whereas males are less and less concerned with body sensations, more and more girls tend to include such themes in their stories. It is highly probable that this finding is related to the observation that with advancing chronological age girls pay increasingly more attention to all things connected with their bodies. It may also be, of course, that a more fundamental biologically rooted sex difference is the major reason for the results obtained.

From the graph in Figure 2 it can be seen that Belgian boys from the French-speaking area have a very different developmental pattern from that of Dutch boys. This difference is probably due to the well-known fact that Belgian boys mature earlier.



Age differences were also noted on several other FPT variables, such as "clock time indications," the use of direct speech,

etc. On the basis of our findings, and after the usual statistical procedures and weighting, we developed a "Youth Score," which has proven quite helpful in diagnosis.¹ Average youth scores for varied age groups are presented in Table 1.

TABLE 1—Average FPT "Youth Scores" for Male and Female Subjects of Varied Age Groups

Age Groups in Years	N	Average "Youth Score"	
		MALES	FEMALES
12-14	55	5.4	6.7
15-16	60	4.8	5.4
18-19	80	4.0	5.3
21-23	90	3.5	4.5
25-28	80	2.8	3.7
30-39	85	2.3	3.3

With chronological age held constant, various normal and pathological groups were found to differ significantly in "FPT-Age." For instance, homosexuals were "younger" than comparable groups of normal subjects, while paranoid patients were strikingly "older" than matched normal controls. Unrealistic subjects were "younger" than realistic ones. Similar differences were noted among failing and successful young men of similar age in industrial settings.

The assumption that the immaturity of a group of subjects is directly related to its average youth score cannot be proven from these findings. It is highly probable, however, that a group of subjects with a youth score considerably "younger" than its average chronological age, will consist of predominantly immature subjects. Studies will be undertaken to determine whether, in accordance with Conrad's theory, pyknomorph subjects get a higher youth score than leptomorphs.² This would restrict the interpretation of immaturity of high youth scores.

By combining and weighting variables which differentiated significantly between especially selected groups from matched populations, we found clusters which could be measured with special scores. We now have such scales for mathematically gifted people, and for successful or failing workers in varied industrial

occupations. We have also developed diagnostic scores on certain FPT variables, differentiating between normal and pathological groups. Validity has been quite satisfactory.⁷ The value of such scales, in my opinion, is not so much their predictive quality, but rather in their tendency to reflect the emotional structure of the group studied. In this way they contribute to a more differentiated approach to personality theory.

THEMES OF CONTRAST

Themes of contrast constitute a special variety, one in which two poles of a continuum are explicitly mentioned, with both influencing the progress of the story. The theme must express the ambivalent attitude of either the hero or of one of the secondary figures toward some object; or it must mention explicitly two contrasting aspects or possibilities of the same event or object, with both having some influence on the progress of the story. For example, one of my subjects wrote a story in which the hero's mother punished him by immediately sending him to bed. The hero, a young boy, was so frightened by the sight of a gangster leaning against a lamp post, that he refused to go until his mother agreed to take him into *her* bed. If he had written that the usually friendly mother had punished the hero by sending him to bed, and if the mention of the mother's loving side had not influenced the progress of the story, it would not have been a theme of contrast.

Themes of contrast in written FPT protocols have been studied by one of my students, K. van der Meer, who suggested the following tentative classifications:⁸

1. Social contrast: poor and rich; top dog and under dog; social contrasts within the hero's own life; etc.
2. Social situational contrasts: the writer expresses two contrasting attitudes or opinions about an action which he considers morally wrong.
3. Contrasts in moods.
4. Contrasts in timing: contrasts between situations or events

expressed in varied time settings past versus present, present versus future, etc

5 Other kinds of contrasts including those between active and passive activities, rest and unrest, work and leisure, duty versus pleasure, variations in weather, etc

It is our hypothesis that themes of contrast reflect the subject's consciously ambivalent attitude toward his world and his problems This is in accord with the philosophy of existence and our belief that man is essentially ambivalent. The conscious handling of this ambivalence, however, is a matter of spiritual awakening and maturity Different factors may influence the subject, either temporarily or permanently, so that he will consider some aspect of an ambiguity as absolute and ensconce himself in it

One of my students investigated the differential meaning of themes of contrast for her subjects It was noted, as we had expected, that themes of contrast are linked to problems of which subjects have conscious knowledge Other themes are more like problems that are just lived, of which there is relatively less awareness

The frequency of themes of contrast in any one FPT protocol may range from none to several Since it was theorized that such themes indicate a certain degree of differentiation in the subject and some ambivalence toward the world, it seemed likely that in comparison with older age groups, younger ones would have more protocols with no themes of contrast The results of research on age groups relative to the variable "no theme of contrast" are presented in Figure 3

The lowest percentage of "no theme of contrast" was in the twenty-four to twenty-five year old group Age differences were significant at the 1% level of confidence by the chi square method The mean number of contrast themes per FPT protocol in male age groups is shown in Figure 4

Here too the means of the numbers of themes of contrast show a maximum in the twenty four to twenty five year-old age group Differences were significant at the 1% level

sample of two similar groups from a single factory, obtaining nearly identical differences.

We also investigated characterological differences among writers of protocols with none, two, and four or more themes of contrast, by evaluating their whole psychological examinations. It appeared that persons with four or more themes of contrast were more differentiated from subjects in either of the two other groups. While their flexibility of thinking and their general mental activity were greater, they were also more often dependent on others and tended toward narcissism, which accords well with the findings in the homosexual group. The group with no themes of contrast was less independent than the group with two such themes. These differences were significant at the 5% level or better.

A control-examination yielded similar results. The hypothesis that a great number of themes of contrast are produced by more differentiated subjects seems highly plausible. It may be assumed that the attitude of ambivalence toward life experiences is accompanied by a differentiated (rich) mental life. Living in the realm of possibilities makes autonomous choices possible.

On the basis of the frequencies of themes of contrast in subjects with a good sense of reality and success in industry, it may be said, however, that an average of 2.4 such themes per protocol could be regarded as an approximately optimal frequency. This optimum may indicate that a healthy normal human being should have an ambivalent attitude toward a number of objects in his life, but that, toward most, he should have an attitude of at least quasi-certainty, which in itself implies a certain ambivalence. Of course, the number 2.4 is not an absolute measure for all reality or life apart from the FPT. It is only an index, valid within the realm of the FPT, for a value of reality which we do not know, and probably never shall know.

In Europe the term "ambiguity" did not reach psychology by way of empirical research, as it did in America, but by way of philosophy, especially the philosophy of existence. It is used as an ontological concept, meaning that man, searching for the

essence of his existence, may find that this existence is essentially ambiguous, and cannot be described other than by utilizing contradictory sentences and paradoxes. For empirical scientific research this means that no opinion the individual pronounces about himself has any absolute certainty, because in a way the reverse is true at the same time. In the mental psychological field it means that in all his experiences man bears an ambivalent attitude toward the people and the objects of his world, as well as toward himself. Non directive counseling records very clearly support this notion. Great novelists, like Dostoevski and others, have clearly indicated it in their heroes' personalities. A psychology which does not seriously consider man's essential ambiguity, must lapse into a view that regards man as nothing more than a complicated rat.

SUMMARY

In this brief discussion of the concept of projection and of projective methods, particularly the Four Picture Test, I tried to demonstrate that thematic test material can make considerable contributions to personality theory, if evaluated with the same scientific rigor as psychometric tests are. An example of scoring an FPT protocol for the several variables considered is appended.

Appendix A

SCORING VARIABLES IN THE FPT PROTOCOL OF AN 18 YEAR OLD GIRL

THE STORY

A boy stands under a lamp post, waiting in the pouring rain. Waiting, but for what? He does not obtain satisfaction from his work. As a matter of fact, he really doesn't think life enjoyable at all. It keeps raining pouring and in his scanty clothes he is wet all through. Only now he realizes that it would have been much better had he remained at home. To sit comfortably by the warm stove now, reading a book or tall.

VARIABLES

*First phrase del
ignation of pr
son. Stried to p*

Body trans-

THE STORY

ing to mother! *But* this really couldn't go on. Angrily he had walked out on her. They had quarrelled because of nothing. Strictly speaking, mother had been right when she said that he should work harder. This can't go on. If he goes on this way, one of these days he'll get fired by his boss.

All these things pass his mind in a moment. Now he will see how he is really doing and how this should be.

At *half past seven* in the morning, *the alarm rings*. He must be at the office at *half past eight*, *but* he doesn't think of that. He stops the alarm and goes to sleep again. Mother is getting nervous and calls him again and again from the bottom of the stairs. At long last, at *ten minutes past eight*, he rises, *swallows some food* unhurriedly, and hastens to the office. Just in time, and *panting*, he enters breathlessly.

"*Ah, there you are. Only just in time! Did you mail my letters?*"

The boy *blushes* and *stammers*: "*No, no, Sir!*" This, of course, is followed by a good scolding, *but*, after a moment he has forgotten it. In the evening, if the *weather* is fine, he plays tennis with some friends. The boys, and especially the girls, praise his *superior play capacities*. That is at least a good thing. *But*, in this way he is never at home. Mother is always alone. She has to see that our clothes are mended, and the worst is, that she has to work hard each day, so that Kees, his younger brother, may have the opportunity to learn something.

He too could take a course. He has been there two times, then it is finished. He would much rather play tennis. . . . All of a sudden he turns on his heels. He has thoroughly thought over everything. He will go to the tennis court only once a week, and one night each week he will go to the class. The remainder he will spend studying. He is going to help his mother. With this decision, he walks home, determined.

VARIABLES

"*But*" No. 1.

Inner monologue.

Indication of time; auditory sensation. Time; "but" No. 2.

Time. Orality: eating Body sensation.

Direct Speech

"*But*" No. 3.
weather predominant. Stilted style. "But" No. 4.

Inner monologue.

Theme of contrast: work—leisure.

Directed toward future. Present tense.

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XVI

**The Phenomenological
and Experimental
Approaches to
Psychology
and Characterology**

IT IS ONE OF THE PURPOSES of this chapter to discuss whether the supposedly assumptionless method of operationism is really capable of dealing successfully with all problems of a psychology properly defined. If this question cannot be answered positively, then we will have to determine whether methods other than those of an operational nature are in a position to fill the void, and, if so, whether they are scientifically trustworthy. The relative advantages of the phenomenological method, generally acknowledged in Europe since the turn of the century, will be considered. Phenomenology includes not only the old method of introspection, but also a descriptive and "understanding" (*verstehende*) comprehension of objects as such. In this context, a distinction may be made between a subjective, inwardly oriented, and an objective, outwardly oriented phenomenology. It is the latter which deserves special attention, although many current advocates of phenomenology are inclined to neglect the objective aspects.

It is often argued, particularly in personality theory and characterology, that operationism is not satisfactory because,

owing to their very nature, the most relevant elements in these areas cannot be reached. Nevertheless, as will be shown, it is possible by means of hypnotism to observe and study experimentally even some characterological 'core' qualities.

The terms "character" and 'personality' as used here are not identical. Character is considered only one aspect of personality, the core area, which forms the basis of man's responsibility and value system. In addition to this character core, personality includes many other dispositions, especially abilities and psycho-physical functions. The latter have been described figuratively by Klages as "the material of character," the fuel with which character functions.¹⁸ This "equipment" of man, as it may also be called, is not as determining for the essence of being as is character, the center of action and values.

CONSCIOUSNESS AND BEHAVIOR

History, including the history of science, seems to move in a circle. For ages "consciousness" as an aspect of experience had been the starting point of psychology. Scientific or physiological psychologists in the second half of the last century (Wundt,¹⁹ Ladd,²⁰ William James,²¹ and others) defined psychology as the science of consciousness (and not of the soul). At the turn of the century, under the influence of comparative physiology, a reaction occurred which brought about behaviorism in the West and the doctrines of psycho-reflexology and reactology in Russia. Frequently, the term 'psychology' was dropped or, at least, used sparingly. In America even the declared opponents of behaviorism and neo-behaviorism now define psychology not as the science of consciousness or, in a wider sense, of experience, but rather as a science of behavior. As early as 1927 Bühler (then at Vienna) recognized the pressing problem and expounded a doctrine of the "three aspects of psychology," which included both the traditional aspect of introspection and the "new" aspect of behavior.² In the thirties, Bühler's pupil Brunswik, following

Otto Neurath, suggested that the term "psychology" be replaced by "behavioristics."^{4, 5} Today it may be said that the development of psychological science has strikingly justified the mediating or synthesizing point of view propounded by Bühler. It is no longer considered old fashioned to recognize consciousness or direct experience as part of psychology, even if, unlike Bühler, we do not give it first place.

The phenomenological method has resumed its rightful place as a means of psychological investigation. Behaviorism of all shades and dates had rejected it in favor of a mere registration of "outside" facts, preferring a causal reduction of all relationships. Simple epistemological reflection, in which behaviorists are unlikely to indulge, could easily demonstrate that even a purely "objective" registration of behavior is impossible without the participation of consciousness, or the "subjective" factor. Even the statements of a behavioral science, which in theory is completely indifferent to consciousness, must necessarily be made in terms that can be understood only by becoming aware of them, or rather by their becoming part of the reader's inner experience. There are no terms which can be conceived independently of conscious experience, not even in mathematics. The hope that everything worth knowing in psychology, including even philosophy, could be reduced to a system of mathematical formulae³⁰ has proved a failure. It is generally supposed now that mathematics can have only an auxiliary function, however important and fruitful it may be. (My point here is merely to emphasize the trend toward a mathematization of all knowledge in classical positivism.)

St. Augustine said of the soul: "*se ipsum per se ipsum videt*" (the soul sees itself through itself). Yet, even today it is hard to explain to a convinced behaviorist that, compared to behavior, consciousness and experience are a rewarding and even necessary subject of psychology, if only because "behavioral science" uses terms and concepts mediated by consciousness and influenced by it. He will hardly be impressed when told that ignoring the aspect of direct experience simply leaves unsolved a mass of

essential and worthwhile problems which psychology as a whole is competent to consider. He will withdraw into his concept of scientific "objectivity" and 'lack of presuppositions' and, shrugging his shoulders, will declare that a lot of things which people would want to investigate simply cannot be studied from his supposedly "objective" and unprejudiced point of view. He would add that one must be content with the age-old recognition of the limits of knowledge, whatever those limits may be. It could be easily shown, however, that even the psychology of perception, the pride of the age of Wundt and of Gestalt theory, would be completely impossible without evidence of direct experience. Only the reaction or non reaction of diverse living beings to diverse sensual stimuli could be ascertained by external means. All this yields nothing more than the statement that there is perception in diverse modes and limits but nothing can be said about the quality and structure of perception. As soon as attention is shifted from reaction to sense stimuli ascertainable externally, and to the contents mediated by them, if only in the manner Brunswik called "psychology in terms of objects" the realm of dreaded "subjectivity" begins.

SUBJECTIVITY AND OBJECTIVITY

Now what about this subjectivity? If I call a color tint "blue," I do what every "normal" person does in his language. In the case of relatively rare exceptions violating this norm I will be able to assume and prove a physiological defect color-blindness. This is what is meant by the *consensus omnium*, which is more than a "democratic" majority decision, and which Hofstadter asserted is a necessary condition of the "operational" concept of knowledge.¹² Hofstadter argued that the phenomenological concept of knowledge is quite different that it is "aristocratic" because it merely appeals to the insight of a few competent observers. This is only a new and elegant formula to make the conflict seem even more unbridgeable than it is, as

if two completely different or irreconcilable concepts of knowledge could exist side by side in the same science. The weakness of such a division can be demonstrated with the example cited above.

If I start defining and analyzing the sense-datum called "blue" with a number of observers intelligent enough to make any kind of statement at all, eliminating only the relatively few color-weak subjects, we should arrive at what amounts to the *consensus omnium* (assuming of course that I do not have to deal with strong adherents of behaviorism who have their inveterate theoretical prejudices). Reasonably unprejudiced observers, capable of making a statement—and there are many—will agree, for instance, that optimal "ideally pronounced" blue is located in a rather well circumscribed zone of the color wheel; that the blue as well as the adjoining slightly different shades of blue appear, in comparison with yellow, as relatively dark (poor in light), loose, penetrable, soft, dull, cold, soothing, etc. Perhaps no complete agreement could be obtained about one or two of these qualifications, but unanimity would be achieved most certainly on the majority of issues, as, for instance, the location of the optimal zone of deepest blue in the color wheel. It can be defined by the approximate length and frequency of the waves. It would be rash to conclude, however, that it is therefore a question of the causal effect of these frequencies through which we arrive at an objective determination of the fact. A number of aspects will have to be considered.

While it may be that the experience of colors depends on the causal connection with electro-magnetic waves of diverse length and frequency, it still is entirely conceivable that something else is at work, and that, for instance, not red but purple would be seen with the relatively longer waves, or vice versa. However, these findings would not explain why red is red and purple is purple, and what the qualitative peculiarities of these experiences are.

The physical wave lengths and frequencies of stimuli are a continuous and not a discrete series, yet the colors change most

strikingly with the increase or decrease of wave lengths, and in several diverse series of variations or "dimensions" at the same time. Also, a physiological explanation of colors, following Helmholtz, would distinguish not more than three components with combinations among them. One cannot understand, in terms of the physical reduction to wave lengths, why optimal blue is generally in a definite zone, optimal green in another zone, etc., and why blue and not green. Moreover, it is difficult to comprehend why along with these colors other descriptive qualities such as brightness, warmth, density, weight, etc., vary with the frequency of stimuli.

It must also be added, as Fechner discovered long ago, that the diverse chromatic colors can be seen as the flicker effect of achromatic lights on the basis of quite different stimuli than are noted in the spectrum.¹⁰ There are many similar facts which in 1904 already suggested the following formula to the physiologist von Kries: "Experience teaches that very frequently the very same sensation can be caused by objectively totally different lights,"²¹ and the reverse. About the same time Krueger made corresponding observations in the field of acoustics.²² In later years Kohler and the Gestalt psychologists used these and similar findings to refute the so-called "assumption of constancy," the dependency axiom of the "classical" psychology of sensation.²⁰

It may be concluded that the facts of inner experience cannot be "objectified" by correlating them with physical or even with physiological data. Are they "subjective" because of this? Obviously, they are nothing of the sort, not even in the sense of the operational *consensus omnium*. The operationist will say that there is intersubject agreement in statements or in protocols, and that the state of affairs is therefore, from his point of view, objective. That is correct, but these statements or protocols can be obtained only through a description of direct experiences by means of introspection and not in any other way. The mere idea that a color can be warm or cold, loud or quiet, etc., cannot be deduced operationally from some other fact. That this should be so appears fantastic to the convinced behaviorist, as if it were

a mere curiosity, of no basic scientific interest, and derived from the language of painters and fashion designers. But agreement can be reached even about these things to satisfy the most extreme demands of the "operationist." Admittedly, one must consider the fact and further research and study are needed before statistical evidence of universal validity can be obtained. Many valuable and surprising discoveries have already been made due to the extraordinary descriptive ability of the investigator. For instance, von Hornbostel recognized in 1931 that smells and tastes differ in brightness, and though this assertion seemed strange at first to the majority of his subjects and even to his colleagues, he could persuade them to rank qualities of smell according to brightness with high intersubject agreement.¹³ He succeeded in arousing a sense of a perceptual dimension, which he was the first to observe.

As the results of similar efforts are confirmed by a consensus which can be documented statistically in sufficiently large number, even the extreme operationist will not be able to dispute the scientific value of such findings. To state this in more general terms: the phenomenological method, if used correctly, is well able to produce objective, inter-individual knowledge, as does any other "objective" method. There is a difference only in that the danger or temptation to use this method purely subjectively or capriciously seems to be greater and more acute in phenomenology than in most other fields. The "subjective" misuse, however, does not lie in the nature of the phenomenological method. Operational methods can also be misused, as frequently occurs, for instance, when validity, which has not been clearly established, is ascribed to a test.

PHENOMENOLOGY "FROM OUTSIDE"

It would be an error to believe that the phenomenological method deals only with perception or kindred phenomena such as "social perception." Those willing to understand the phenom-

enological point of view must recognize that the psychology of perception, thinking, memory, feeling, and volition will always remain "unfinished business" if practiced as a purely external psychology of achievement, as Brunswick attempted to do in his "psychology in terms of objects"⁴ Phenomenology is indispensable for the whole field of general psychology. It follows that social psychology, and therefore part of developmental psychology, are in the same predicament. This has recently been recognized, even in the United States, by those who, like MacLeod, favor the concept of "social perception."⁵ Of course, not very much is achieved by the mere statement that there is something like "social perception" or individual apperception of the group, and how it may be deduced from behavior. Rather, understanding of social phenomena will depend on the shadings of these social modes of experience, which can be noted and described only introspectively. For instance, Freud⁶ and Adler⁷ have shown that such social factors as experiencing the family constellation are important for the fate and development of the individual. Le Bon has described the formation of a "spontaneous mass," that is, the reaction of the masses toward political situations and impulses, and how the concrete situation is experienced emotionally, and not merely cognitively.⁸ The "leader," or statesman, or "enemy" is experienced immediately. In this and other contexts Scheler has shown the importance of "feelings of sympathy" and their diverse distinguishable qualities and personal relevance.⁹ One must have experienced compassion or moods such as anxiety, joy, ecstasy, longing, homesickness, etc. to know their meaning for social and personal events. For instance, experiencing the separation and resignation of homesickness can potentially destroy the life of a man or higher animal.

All this is well suited to put the aspect of experience back into human psychology. What really matters is that the phenomenological method is not limited to the description of direct experience or consciousness.

Psychology is not only a science of man, his behavior, and his direct experience. There seems to be some danger that certain

zealots would not only rehumanize it (which is most urgently needed) but also, so to say, over-humanize it. Of course, there are also very important aspects in comparative psychology. But independent of this alternative, whether animal or human psychology, there is also a science of objects as they appear in the psychological sense. The "ideational abstraction" of Husserl,¹⁴ the "phenomenology of essence" of Scheler,³⁴ Klages' theory of appearance and expression,¹⁹ are all directed at these objects as "beings-in-themselves," although not precisely in the Kantian sense of "consciousness in general." There is the problem within the realm of perception of the structure of the world of color, sound, touch, etc., as described, for instance, in the writings of Katz.¹⁷ Does it exist regardless of the concretely experiencing consciousness of an individual, his genetic development, or his typical and individual peculiarities? What qualities does the object have in the ideal case when it is observed, or experienced, by a sufficiently differentiated observer? A sensuous object can indeed become an imagined model of potential sensuous experience or appearance.

All kinds of experience or appearance, including expression obviously coming through the senses, can be investigated phenomenologically. There is expression in expressive behavior, in the act of self-expression, which immediately "transcends" itself into inner experiences that are manifested externally. The contrast between the inner and the outer is resolved; in expression the inwardness appears outside, that is the meaning of the word "ex-pression." Scheler said long ago, "The phenomena of expression suggest to us immediately, in the sense of original perception, not by inference, that there are experiences in others; we are aware of shame in blushing, of joy in laughter."³⁴ As Buytendijk and Plessner concluded, expression is "psychophysically neutral," that is, it is internal and external at the same time.⁸

It follows that a proper phenomenology of expressive behavior will have to be also a phenomenology of the inner experience of expression. In this way, too, something can be learned about

the "inner world" of animals, to use von Uexküll's expression in the strict sense,³⁰ even though the behaviorists may dispute this or smile at it. You can look at a dog and know that he is afraid, joyfully excited, depressed, etc.³²

Expression thus becomes the intermediary between man and man, between man and animal, and is at the same time the royal road to the study of personality and character. As Klages demonstrated it is the foremost instrument of personality diagnostics.¹⁹

CHARACTEROLOGY AS INDUCTIVE ONTOLOGY

Characterology does not deal with "events and states of mind" and is not concerned with what is immediately accessible to observation and introspection. Thus far the phenomenological method, as a description of experience and behavior, has no place in characterology, however surprising such a conclusion may appear.

Characterology, like all personality research, is related only to dispositional aspects and permanent capabilities of experience and actions. In this respect it is an inductive ontology, an empirical theory of modes of existence. Yet this whole topic can not be studied without the experience of the self and another mind in the "phenomenon," whether it be called inner experience or expression. To say it in more general terms, there is no understanding ("*Verstehen*") either of oneself or others, without phenomenology. There is not only one's own experience, but also the mirrorings of other experiences, in what may be called "expressive experience."

Allport,² Klages,¹⁸ Lersch,²³ and the author²⁴ have been criticized for relying too much on linguistic data, for operating with a questionable "wisdom of language," and for assuming as certain that the allegedly "mere chance" expressions of "character traits" in any modern language constitute "obligatory pointers to psychic realities," the value of which is taken for granted. Such

objections may carry weight against Heidegger, and perhaps against Hegel, whose "phenomenology" indulges in a certain "verbalism" based on decisions prejudged purely by linguistic constructs. It does not hold, however, for the previously cited theories of personality, where it is a problem of the "phenomenological" demonstration of structural distinctions drawn from the order of "personality traits," which are not dependent on any language whatever. This can be demonstrated by model cases: language will inevitably be drawn on as the intermediary, and vocabulary will be examined for its relative usefulness. The state of affairs can be demonstrated "deictically" in the imagined model case, described and classified similar to a phenomenological analysis of color. Of course, the purpose is not to discover optical characteristics, but rather to ascertain characterological qualities, that is, personality traits.

An attempt could also be made to try to verify the imagined model of a character structure by "casuistics," or case studies of concrete individual characters, whether fictional, historical, or clinical. An individual case study would reflect the fruitfulness and, if possible, the need for the structural viewpoints achieved in theory. But it is still the phenomenological, and nothing else, which tries to become more concrete by using an individual case. Phenomenology thus justifies the casuistics; "cases" will be selected more or less arbitrarily to demonstrate *quod erat demonstrandum*. It would be easy to produce other cases as well, which would support not what had been asserted but the very opposite. Case work is not a strictly empirical method, independent of others, but provides only one kind of illustration of something already established. From casuistics alone nothing can be proved.

Our own system of characterology may serve as example.^{38, 39} On the basis of demonstration and description including both historical and clinical cases, an attempt has been made to suggest a theory of the structure of the relatively constant (though always developing) substratum of personality, which would serve as a basis for a developmental characterology.³⁸ A theory

of a two-dimensional stratification of personality (*Schichten-theorie*) is used for this purpose⁴²

Character is conceived as stratified in two strictly distinct and divergent dimensions (a) according to the model of geological layers in seven functional areas, from "below" to "above" vitality, drive, sensibility, feeling, imagination, reason, and will, and (b) in a quasi-horizontal dimension, inward, toward the "core" of man. Character thus is articulated in a shell stratum, to which belong both the vertical structure of layers and the core stratum. This core consists of conscience and "*Gemut*" as the locus of social ties, taste, and partly intuition.

The "personality traits" result from various articulations of those strata and their interrelations, conceived in "polar" contrasts, for instance, vital expansiveness opposed to vital defensiveness, "affectivity" or hot temperedness contrasted to "depth of feeling", "esprit" or brilliance of thinking compared to depth of thinking, vehemence of will and determination of will, etc.

VALIDATION BY HYPNOTIC EXPERIMENTS

In general, *ex post* experimental verification can be readily established for phenomenological demonstration. This is true also of characterology, although the problem of experimental method poses greater difficulties. Experimental hypnosis as conducted in our laboratory offers an approach to validation. For instance, the phenomenological theoretical concept of the existence and the structure of a "character core," can be verified experimentally by noting what may be described as the "character barrier." The concept of "core" is derived from Krueger,²³ but has also been used by Lewin²⁴ and by Murphy.²⁵

Our experimental hypnotic procedure is as follows. After deep hypnotic rapport has been established, an effort is made to provoke a conflict between the experimenter and his subject. This usually occurs when the subject is instructed to do something intolerable or unacceptable to his character. Our findings

suggest that (a) the will of the hypnotized subject is blocked or influenced only so long as there is no interference with personal integrity; (b) violation of personal integrity, which may be called "bumping against a character barrier," produces a spontaneous severance of the subject even from the deepest rapport or, in lighter cases, refusal to obey; and (c) the character barrier varies with different individuals. It is closely related to personality and is important for personality diagnostics.

While, so far, no exact statistical data are available to demonstrate these findings, no exception from the rules cited has been found in long series of experiments conducted over several years on both sides of the ocean with many subjects.⁴³ The literature on hypnotism yields similar experimental evidence.³⁷

A striking example was reported by Janet many years ago.¹⁶ A well-trained subject, female of course, was instructed to undress in public. She reacted by slapping the face of the hypnotizer and awakened against his will. It could be supposed that this reaction occurred on the basis of a purely elemental drive. Yet, the sense of honor or shame involved cannot be interpreted merely as a component of pure drive. The argument becomes even more stringent when the widely discussed problem of criminal hypnosis is considered. As Janet,¹⁶ White,⁴⁷ Weitzenhoffer,³⁷ and others have noted, when criminal acts are suggested, a subject not personally so inclined or disposed will react either by severing rapport or by refusing to execute the posthypnotic command. What occurs here is obviously a protest of conscience.

The most vigorous attacks on the subject resulting in both physical and psychical pain, unpleasant feelings, and even self-ridicule before others, cannot disturb "good" rapport, or detain a "good" subject from carrying out posthypnotic commands. Freud's "pleasure principle" may be violated as much as the experimenter wishes, but he cannot invade, without obstruction, the "core" and personal reservations of the subject, presupposing, of course, the presence of inhibiting dispositions.

Another more complex example of the same kind concerns a young lady, a psychology student, who in deep, frequently

tested rapport was given the posthypnotic instruction to put a flower into her hair, which seemed quite harmless. When awakened, she picked up a rose at the given time, hesitated, and then slowly peeled off the leaves. When asked about her action she was unable to give a reason. After the situation had been explained to her, she declared that never in her life had she put a flower in her hair and that she had always considered it to be poor taste.⁴³ Here then was experimental evidence for the hypothesis that even modes of appearance, particularly in a cultured woman, may be related to a core structure, which can resist interference under very strong hypnotic suggestion.

There is then *ex post* empirical evidence, not only for the existence of character as such, but also for character "cores" or "core" regions. This may be achieved in different ways dependent on the peculiarities of the hypnotized person or the individual "case." In this way experimental hypnosis becomes a means of character diagnosis. What is most important, however, is that the behavioral findings in hypnosis verify what *before* had been demonstrated phenomenologically.

PHENOMENOLOGY AND MEASUREMENT

It may be shown that most non-exact or "projective" methods of characterological diagnosis are based on phenomenological principles. This includes the TAT, Rorschach, Warrege, etc., and also the techniques of "depth psychology" insofar as they are valid. While there is no means for exact measurement, there is also no point in saying that therefore the projective methods are purely intuitive, purely subjective, and of no scientific value.^{40, 41} The assertion that description cannot yield any generally valid results is itself something subjective, an untenable dogma. If somebody can count correctly or incorrectly, he can also describe something rightly or wrongly. If a correct calculation is universally recognized, then a correct description should be similarly accepted. The same is true of understanding

("Verstehen"), which, in the realm of psychology, is part of description and cannot clearly be separated from it.

The necessity and legitimacy of the phenomenological method seem obvious. To say that an object is objective only when measured, in the proper sense of the word, contradicts all daily experience and usage. We talk, for instance, about an animal and its habits, without using any kind of measurement; still we speak in a way that is understood by everybody and we can agree about it with every sensible listener or reader. To say that we do not know anything about the existence of an animal before we have measured or weighed it as an individual, or as a species, according to average or dispersion values, would obviously be childish. In the same manner, lots of things are known about the color "red," including a whole set of descriptive definitions long ago developed by Goethe, although no specific measurements have been suggested. These measurements, insofar as they could be made, do not really concern red as a quality. They deal merely with the physical and physiological preconditions of the appearance of red. They have hardly anything to do with the proper subject of psychology, the qualitative aspects. Also, "character traits" or partial personality structures, such as anger, "cold blood," delicacy of feeling, or whatever are qualities which cannot be wholly accounted for by any quantitative preconditions. It is not necessary to "measure" anger to know that it exists and what it is like. There is no need for a single number, threshold figure, or minimal frequency, to diagnose choleric temper in an individual. It is unnecessary to know how many times a week somebody "blows up" in order to call him "short-tempered."

It seems like circular methodological reasoning to say that one can consider character traits and personality structures as existent only if "measured" by specific tests. A test does not say what it actually measures; rather, the psychologist constructs the test to measure something. A test which is not directed and tailored to an object that is known beforehand, measures something unknown and cannot of itself indicate what this unknown

thing is. A test must be interpreted to comprehend what it measures. This is the same thing as Burt's comment on factor analysis, namely, that one cannot take out of it anything that was not first put into it.⁷ Even the interpretation of the results of factor analysis assumes an understanding of relations and thus presupposes phenomenological insights which were gained from description. Faith in the magic of numbers and measurements, which alone are supposed to constitute existence, is sheer superstition.

Measurement does not precede existence; rather, existence precedes measurement. It may, of course, happen that something is measured without properly knowing what it is. The measurement will yield a number, but not meaning. To speak in more general terms, measurement is a *formal*, not a substantive determination. Meaning must always be given to it. It does not result from measurement as such but comes from understanding, that is, from insights into relationships. Such insight is not measurable and cannot be replaced by any calculation whatever.

It is the task of psychology to teach men to understand themselves and others better. Understanding presupposes phenomenology. It is itself a phenomenological act, an experience. This is what is meant by MacLeod's formula that phenomenology requires "an attitude of disciplined naivete," or perhaps one could say also "an ability to *experience critically*."

SUMMARY

The phenomenological approach in psychology is a descriptive method which aims at understanding (*"Verstehen"*). It has varied forms and different areas of application, which may be described as (a) "phenomenology from inside," the description of direct experience and of phenomena, and (b) "phenomenology from outside," which is derived from objects of expression, leading back to introspective analysis, and objects of appearance, that is, phenomena as such.

personality traits or principles of character structure can be tied to phenomenological analysis as readily as can colors, tastes, acts of thinking or willing, processes of imagination, cognitive traits, or any other events or states of consciousness. None of these can be completely and meaningfully understood in terms of quality and interrelations without the phenomenological method. It follows that there can be no science of psychology without phenomenology.

Similarly, without phenomenology, characterology and characterological diagnostics would be impossible. Diagnostic studies are phenomenological even when there is a pretense to be exact in the conventional sense of the term.

In general, *ex post* experimental verification can be established in phenomenological demonstration. For instance, the theoretical concept of the existence and the structure of a "character core," proposed by various authors on the basis of purely phenomenological means, can be verified experimentally in hypnosis by studies of the "character barrier." An attack on the postulated "core" is regularly resisted either by severing rapport or by refusing to execute the hypnotic or posthypnotic command. This may occur in varied individuals in different ways, dependent on the peculiarities of the hypnotized subject. Thus experimental hypnosis becomes a method of character diagnosis.

It is circular methodological reasoning to say that one can consider character traits and personality structures as existent only if "measurable" by tests. A test which is not directed and tailored to an object that is known beforehand, measures something unknown and cannot indicate what this unknown thing is.

The phenomenological method is, by definition, not exact in the sense of the inorganic natural sciences, but still is objective in that, practiced correctly, it yields inter-subject agreement. It is a method both for the social sciences and the descriptive natural sciences, and is as valid as these disciplines are. A psychology without participation of the phenomenological method is not psychology.

It may be concluded that both the operationist and the

phenomenologist are correct, each in his own way, but their concepts of knowledge cannot ultimately be different. Not only can and should the phenomenologist satisfy the operationist by providing him with experimental and statistical evidence but the operationist should also admit that his results, such as those from factor analysis, need the verification and interpretation of phenomenology. No system of psychology can be possible unless these two methods or aspects can be brought into agreement.

*A Note on Eysenck's Commentary**

Eysenck's critical commentary and evaluation endow my chapter with unexpressed views and suppositions suggestive of the "man of straw" kind of critique he castigates so severely. As Allport observed in his Overview, I certainly do not reject operational psychology in general, rather, my aim has been to effect a synthesis between this approach and the phenomenological or "understanding" psychology.

To state that "a precise and quantitatively developed theory would be anathema" to the "understanding" psychologist is simply a misconception. Who would be so unreasonable as to deny that measurement is a good thing in its proper place? I can readily agree with McClelland's comment, "Why not count since it gives you added information?" emphasizing, however, the word *added* and that counting may sometimes not be feasible for technical reasons.

Descriptive phenomenological psychology and measurement may very well be combined to assist each other. This has been amply demonstrated in my two books on hearing and musical talent⁴⁴ ⁴⁵ and also in my recent article summarizing the psychology of hearing,⁴⁶ all of which included many figures, correlations, graphs, and other quantitative data. It ought to be remem-

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New Concepts in Experimental Depth Psychology

THE EUROPEAN PREFERENCE for the term "characterology," instead of "personality" as used in North American research, reflects primarily a different approach. Personality, from the Latin *persona*, the mask of the actor, refers to role playing, to observable behavior. Character, from the Greek *charasso*, to engrave, refers to man's engraved structure, to his inner behavior. Character is a more absolute concept, related to heredity and fixed determinants of behavior, while personality is a more relative concept, related to the variable influences of the environment. Both concepts are based on a different relatedness of man. Characterology is concerned mostly with man's relatedness to himself; personality deals more with man's relatedness to his environment. In this sense, European characterology emphasizes man's existence as a bio-philosophical phenomenon, oriented toward his biological constitution and philosophical orientation or world-conception. North American research in personality has a primarily behavioral social orientation. Behavior is considered something that is learned and can be unlearned, and therefore changed. It is patterned from without while existence is patterned from within. Social orientation views behavior principally in terms of adaptation and usefulness.²¹

The difference between an inner and an outer orientation refers to two aspects of studying man, that is, either as an object of observation and experimentation like any other part of nature (the American approach), or as an object of introspection and interpretation (the Continental approach). In the recent past behaviorism and experimental psychology have been contrasted with psychoanalysis and value psychology as the extreme starting points for the study of personality. At this time another dichotomy may be offered, not experimental psychology versus psychoanalysis, but psychoanalysis versus psychosynthesis. Psychoanalysis is directed to experimental data or inner experiences, but from the standpoint of accidental conditionings or traumata. Psychosynthesis includes the factor of configuration, design, and man's values. A study of *what* man experiences, *how* he reacts to his experiences, and *for what* he uses them demands a converging approach of analysis of inner data and of synthesis and integration.

In the material to be discussed my ideas and concepts are European in origin and North American in development. There is an attempt to join both rationales, characterology and personality, emphasizing inner and outer perception, and using interpretive and experimental methods. The analysis and synthesis of behavioral facts and values produced a new perspective, the origin and basis of which will be demonstrated in the following survey of my methods in experimental depth psychology.^{3 11 14 24}

LEVELS OF INTERPRETATION

The method of academic psychology consists of control, analysis, repetition, and correlation. Control means that in order to observe changes only one factor is varied at a time. Analysis implies that the object of investigation is divided into its component elements or factors. Repetition checks the reliability of the method, and correlation tests its validity. These four steps demand that the object under investigation be kept on the same

level, that its condition remain unchanged and static, and that its elements be isolated, regardless of degrees of complexity and unity. Successful as this method may be with single reactions, isolated aptitudes, and units of learning, it is unsuccessful for the investigation of complex patterns of personality including emotion and thought. In order to study such aspects of personality, experimental methods have to be adjusted to the existence of patterns, levels, and dynamics.

It may be helpful to compare the study of personality with our perspective from an airplane. At an altitude of 10,000 feet a city appears as an abstract design, its pattern forming part of an abstract landscape with flat squares of fields, luminous expanses of water, irregular texture of mountains, and changing brightness through the reflection of clouds on the ground. At such an altitude the city is seen as an integral part of a total landscape, observed from what might be called an integral view.

If the airplane goes down to 5,000 feet the total city is still visible but without its relationship to the surrounding landscape. Its general pattern, its square, concentric, radiating or confused design is distinguishable, observed from what might be called a pattern view. Descending further to 500 feet above the ground a city block is noted with clefts of streets, houses, and the moving shapes of vehicles. The city structure is perceived from a part view. When approaching ground level, in the process of landing, some single houses may be distinguishable and for the first time on the flight the fronts of objects are noted. "Elements" of the city are seen in elemental view.

Theoretically any area may be observed from different levels. In this example of four levels of perception the same object appears less concrete and more abstract in design when seen from an integral view. The forms and interrelations are noticed from the pattern view. The partial view affords an awareness of style and expression. The elemental view yields only some characteristics, but without indicating their relation to the whole. Levels of behavior may be similarly distinguished.²²

PSYCHOLOGY AND DISTANCE

In order to see something as a whole we have to step backward. A landscape is seen only if viewed from afar. The total composition of a painting is perceived only if studied from a slight distance. Man's life or historical events appear unified only when observed in a temporal distance. In thinking about something, man thinks about it from a distant perspective. It is man's experience of distance in time and space which distinguishes his mental operations from those of animals with their immediacy of reactions. As Thomdike said, "An animal can think things, but it cannot think about things."¹³ With an objective attitude we remove ourselves from our preferences and biases. Aesthetic reaction demands the viewing of an object on its own merits, looking at it from that emotional distance with which a sunset or a mountain is admired. The actor uses the factor of distance by speaking through the figures he creates. The bird's eye view makes people more aware that distance changes perspectives and consequently the meaning given to what is perceived. As Ralph Waldo Emerson observed, "Vantages are lost sight of at a little distance, at a little height."¹⁴ More specifically, "The voyage of the best ship is a zigzag line of a hundred tracks. See the line from sufficient distance and it straightens itself to the average tendency."

Air distance shows various elements in their spatial integration. Historical distance permits the observation of varied single events in their temporal integration. Distance, then, is that factor which both unifies the different parts of the same object and also shows them from several perspectives.

While experimental psychology is based on the near view of man inspecting his reactions microscopically, interpretive psychology is based on the far view, telescoping man's past and expectations for the future. The telescopic inspection, solely based on information inference, and deduction, cannot be ver-

fied experimentally, but microscopic inspection tends to leave out the breadth and depth of personality. In an effort to combine the experimental method with a view toward the depth of personality, experimental depth psychology was created.¹⁴

THE UNITY OF EXPRESSIVE BEHAVIOR

The layman and the artist look on personality from a distance, which affords a total and unified impression. Descriptions of total patterns of expressive behavior were already noted in the biblical proverbs, "A naughty person, a wicked man, walking with a forward mouth, he winketh with his eyes, he speaketh with his feet, he teacheth with his fingers." The experimental psychologist, however, viewing behavior microscopically, believes that man's expressive movements are successively conditioned by his environment. From this point of view, man's manner of speaking may be based on parrot-like imitation, his kind of walking on motor conditioning, his characteristic gestures on education and culture, his type of handwriting on learning or accidental positions of hand and paper. This means that all forms of expression are dependent on outer stimuli, unrelated to each other. It is for this reason also that Munn classifies physiognomy and graphology, which claim to describe man's total personality, as "common psychological rackets."¹⁵

What from a far view seems to be unified and determined, from a near view appears to be disconnected and due to chance phenomena. Some new kinds of experiments were needed to decide this question one way or another. For that purpose I introduced the *multiple matching method* to demonstrate the unity of a person's expressive behavior. Specimens of various forms of expression were obtained from many persons, including voice recordings; handwriting samples; photographs of the full face, profile, and hands; film strips of gait; and samples of story telling.

Subjects were asked to match one type of expressive behavior

with another given by the same person. Two forms of expression from three people were presented in mixed order. For instance, three recorded voices, speaking the same sentence, were presented together with three corresponding handwriting samples of the same sentence. The chance expectancy for correct matchings of three pairs is one out of three, or 33.3%. The number of correct matchings obtained in these experiments was, on the average, one and a half to two times the chance numbers. A great variety of matchings was investigated: matchings of profiles with hands, story telling with specimens of handwriting, gait with handwriting, etc. The successful matchings, many times above chance expectation with some specimens and observers, indicate that a person expresses the same characteristic by different means. The expressive quality cannot be sought in outside factors such as imitation, learning, conditioning, and chance, but must work from within the organism, as a common denominator of expressive behavior.

Subsequently I enlarged the study of perception of common characteristics from photographs of the full face, profile and hands, handwriting, voice, gait, and story telling. Characterizations were obtained from many people about a subject's different forms of expression. When these judgments were given to neutral observers with instructions to match those which belong together, it was noted that (a) different observers judged the same form of expression, as for instance the voice, in a very similar way and that (b) a subject's different forms of expression, such as voice, hands, handwriting, etc., were also characterized in a similar way.

Another important question was whether the interpretation of expressive behavior was 'true', that is, whether it coincided with behavioral daily life observations of the same people. I submitted the personality sketches of several individuals to subjects who knew these persons well with the requests to match the sketches and names. Most subjects were able to recognize acquaintances from the characterizations of their expressive forms far above chance expectancy.

The matching method indicated that in many instances personality may be judged correctly from expressive behavior, that the various forms of an individual's expressive behavior follow uniform patterns of expressiveness, and that personality can be interpreted as a whole.¹ Furthermore, the matching technique showed that expression of behavior and its perception and interpretation by others follow the same laws.

THE UNITY OF CONSCIOUS-UNCONSCIOUS PROCESSES

Experimental psychology, initially rejecting even the concept of the unconscious, today accepts only the existence of states of unawareness, rejecting psychoanalytic theories about the particular structure of the unconscious mind. In Boring's words, "There is no reason to believe that such processes are necessarily different in quality from those of which we are conscious."²

Since the expression of behavior and its perception and interpretation by others seem to follow the same laws, the question arises whether the perception and interpretation of man's expression by others follow the same laws as man's self-perception and self-interpretation. With reference to the concept of the unconscious there arises a further question: Do man's conscious self-perception and self-interpretation follow the same laws as his unconscious self-perception and self-interpretation?

Conscious self-perception and self-interpretation may be studied in autobiographies and with self-rating scales. These also have been used to compare man's conscious self-evaluation with his evaluation by others. Experiments on unconscious self-perception were not conceived by a near-view psychology. I introduced the concept of a "psychology from a distance" in order to design methods of distancing man from himself. In this manner, man sees himself in a new light, perhaps provoking unconscious reactions toward himself.

The first step in the *method of obtaining unconscious self-*

judgments was to record a subject's expressive behavior without his knowledge. A concealed microphone recorded his voice and a hidden camera took pictures of his face. While the subject stretched his hands through a curtain, with the apparent purpose of measuring his reaction speed while pressing a button, his hands were photographed. The shadow of his profile, thrown on a screen, was photographed from behind the screen. A hidden movie camera filmed the gait of subjects who, while carrying out an experiment, had to wear the same kind of ski suit and muffled shoes. Handwriting samples were photographed, enlarged, and presented in mirrored form.

In the experimental setting the subject was confronted with samples of his own behavioral expression, mixed with those of two other persons who in one experimental series were known to him, in another series unknown. The standard instruction was to describe personality characteristics from these samples of expression. Although the subjects recognized the voices, profiles, and sometimes the hands of their friends, the first striking result was that the majority did not recognize themselves, neither their voice, nor their hands, nor their profiles, nor their mirrored handwriting, nor their style of story telling.

In the absence of self-recognition, a subject could characterize himself at a distance, evaluating himself as if he were a stranger. And there the second striking result appeared in that self-judgments in a state of unawareness, called unconscious self-judgments, were markedly different from all judgments about the subjects given by others, and of their own about other people. Self-judgments also tended to be longer in word count.

When the judgments were ranked according to favorable or unfavorable evaluations, it appeared that the self-judgments were either especially positive or especially negative. For instance, when other people said, on the average, that A was an intelligent person, A himself would remark that A was a genius and a person he would like to meet. When other people said on the average, that B was an unstable individual, B himself would remark that this person was highly neurotic and disagreeable.

Further details of personality descriptions revealed a third surprising difference between unconscious self-judgments and judgments of others and by others. Unconscious self-judgments expressed wishes and fears.

There was a fourth surprise. Most subjects did not recognize those forms of expression which are generally perceived continuously, such as their voice, hands, and handwriting. But the majority recognized the one form of expression which is usually not perceived—gait. They watched a film in which various people were walking while performing an experiment. All were dressed in the same suit and their faces were blotted out. When the subjects were asked to describe the personality of each person from his gait, self-recognitions mixed with self-directed emotional attitudes were obtained. For instance A said, "I immediately recognized myself, but it is very strange that I immediately took a negative attitude; strikingly hampered." B answered, "complete stranger to me, but a person full of humor. Clumsy. I should have thought that it was a 16-year-old ship's boy who intentionally shows himself to be clumsy and is then disappointed in finding that others do not laugh at his jokes. No way to see that it is I." When this subject was asked for her association to a ship's boy, she remarked that as a child she always wanted to go into the Navy, but no girl could become a captain. She was a very depressed person and felt herself to be clumsy. In her unconscious self-description she rationalized her clumsiness as an intentional one, produced in order to make people laugh. These and many other reactions demonstrate the transfer of childhood desires and memories to self-perception. It must be noted, however, that unconscious self-judgments and half-conscious self-judgments, those which lead to self-awareness, are not basically different from conscious self-judgments.

It was also observed that self-judgments are not accurate but tend to be consistent over time. After an interval of several years the subjects were given their own unconscious self-judgment about their voice, and the judgments made by others about this same form of expression. Asked to select the interper-

which best described their personality, many subjects, without recognizing their self-judgment, called it "surprisingly good" As one subject said, 'I, myself, could not characterize my own voice better'

Experimental comparison between unconscious self judgments and judgments of others also yielded some insight into the dynamics between self and environment I noted that subjects emphasize in other people what they themselves strive to be or fear Perception of the environment seems colored by self evaluation

Experiments with the self-view at a distance illuminated a network of unconscious attitudes toward self and the environment They offered experimental access to unconscious evaluations and produced the dynamics between conscious and unconscious self-identification The phenomenon of resistance against self-identification, the provocation of wish images and fear images, the transfer of childhood desires and memories to self-perception, the projection of values on environment, all functions observable in psychoanalysis, could now be verified experimentally There appeared one major difference, however Contrary to psychoanalytic theories, and in agreement with the supposition of academic psychology, it seems that the process of conscious and unconscious evaluation are basically quite similar in quality

A new type of self-judgment at a distance was obtained by using the *"split face" method* Full face photos were taken and prints were made from both sides of the negative, thereby producing both the usual photograph and its mirror image. After determining the midline of the face from the midpoint between the pupils and the middle of the upper lip, each picture was bisected The photograph of the right side and the mirrored right side were fitted together, and the same was done with the left halves The result was two full face pictures one of which portrayed the expression of the right face and the other the expression of the left face

Some subjects, when confronted with their split face pictures, did not recognize themselves In their unconscious self-

judgments they preferred one face to the other. It was noted that the right face tended to be more similar to the normal full face picture than the left face was. In unconscious self-judgments the left face elicited more projections of wishes and fears. To men the left face seemed more feminine, and to women it appeared more masculine. Mentally ill patients emphasized positively only the left face, often ascribing feminine characteristics to it. Frequently the left or right side of the face was said to be related to the subject's father or mother.

In studies combining the right and left sides of the face from photographs taken at different ages of the subject, from three years up to thirty-eight years of age, it was observed that the expressiveness of the left face changes less during development than does the expressiveness of the right face. The left face seems to be less featured and reflects a more unconscious expression. One half of the face resembled more the father, the other more the mother. As with man's other forms of expression, the two sides of the face reflect different spheres of personality, a dissociation within the unity of the pattern. When confronting a subject with parts of his face, whether the right or left side, whether the upper part including the eyes or the lower part including the mouth, reactions to different spheres of personality may be elicited, including projections which enable the subject to diagnose himself, thus reflecting interrelations between constitutional factors, preferences, and motivations.¹⁴

SELF-IMAGE AND PERCEPTION

Man's lack of self-recognition might be explained in several ways. Bone resonance may change the sound of the voice. Hands are not expected to be detached from the body. Handwriting seen in a mirror has no similarity to its normal form. Such explanations, however, do not account for man's emotional reaction toward his own forms of expression, the projection of wishes and fear images on unconscious evaluations.

Since people do not ordinarily expect to see themselves, it was possible to check on this lack of self recognition by telling a group of subjects that their own form of expression was among those to be evaluated. Not only was there no self recognition, but, on the contrary, the subjects did not believe the instructions. It may be deduced that there is conscious resistance against self-recognition, but unconscious identification. The resistance may be explained as a defense against one's own overevaluations and underevaluations. One of the subjects remarked, "I had the suspicion that the voice was mine, but I didn't tell you that because I was ashamed to say such beautiful things about myself." Also the opposite may happen, that is, a defense against underevaluation. Freud reports the following observation. While sitting in a compartment of a sleeping car, a violent jolt opened the door of the adjoining washroom. A man appeared in the compartment. Freud says, "I remember that his appearance was very unpleasant to me."⁸ It was his own image reflected by a mirror in the washroom door. A repulsion against or admiration for the self image is quickly apparent to anyone looking at photographs of himself.

It may be theorized that, when seeing ourselves at a distance, we evaluate ourselves unconsciously, as is often done in dreams. Overevaluation seems to be an expression of wish fulfillment while underevaluation appears to be an expression of fears, especially when advanced by persons with high ego ideals.

It has already been observed that most dreams are self evaluations of attitudes toward the environment and the world at large, and that they actually express unconscious attitudes toward ourselves.⁹ In other words, dreams seem to reflect an unconscious self image. Since this unconscious self image tends to conflict with the conscious self image, the dream message becomes a message of the conscience, dealing with inner conflicts. And since the dream which I called a 'mirror of conscience' threatens the conscious attitude toward reality, perception of the dream's self-image and the memory of the dream's self are repressed.

The following general observations may be made. Man has an

emotional reaction toward his self-image, consciously and unconsciously. The unconscious self-image tends to conflict with the conscious one, in terms of overevaluation or underevaluation. The self-image is interpreted in terms of wishes to play certain roles or with fears of inadequacy. The self-image determines perception of reality, in that man looks for those things which support his self-image and tends to overlook what threatens his self-image. Reality is interpreted in the language of the self-image, by using personal criteria and symbols.

MOTIVATIONAL STUDIES IN PERCEPTION, MEMORY, AND CHOICES

PERCEPTION

The above observations and interpretations suggested a variety of experimental approaches. I investigated the characteristics of self-perception by experiments with a tachistoscope, which, like a camera shutter, exposes an object for a fraction of a second. Subjects were shown their own photograph, handwriting, or photographs of their paintings, measuring the time of resistance against self-recognition and the interpretive processes. Studies in self-perception were enlarged by recordings of subjects' rhythm of tapping, breathing, and writing on a blackboard. In most cases, subjects did not recognize their rhythm but liked it better than that of others. These experiments introduced motivational studies in perception. For example, it was found that subjects did not recognize certain numbers or words when presented in short exposure by a tachistoscope. In later stimulus-response experiments these previously unperceived numbers and words led to emotional associations (e.g., six—sex), indicating that they touched off "complexes." The recognized numbers and words did not do so. Similar motivational studies in perception were later elaborated by Bruner, Postman, Murphy, and others.^{4, 5, 14}

MEMORY

Experiments in sensory perception were paralleled by experiments in mental perception. The influence of emotional factors

on memory could be demonstrated by reading a story to subjects with instructions to retell it later by using the original words insofar as possible. Subsequently, all omitted or changed words were given as stimuli for association experiments mixed with an equal number of recalled words. It was found that the words omitted or changed in the retold story produced over three times as many emotionally negative associations as did the recalled words. The influence of emotional factors on memory was further demonstrated by reading proverbs with positive and negative connotations, as for instance, "While there is life there is hope," and "Hope is as cheap as despair." Those who characterized themselves as pessimists remembered more negative proverbs than positive ones. Such experiments in retentiveness supported the observations of psychoanalysis. Other experiments demonstrating the dependence of memory on motivation have been summarized by Rapaport.¹⁰

CHOICES

The interrelations between motivational forces in perception and memory was studied by converging methods which I developed for a "cross road" test. A given reaction or decision was studied with reference to recall, perception, association, and choice. Five trait pairs were selected: impulsiveness—responsibility, feelings—rationality, introversion—extraversion, egoism—altruism, passivity—activity. Each trait pair was expressed by a story in which a decision had to be made. Five stories referred to the same trait pair and the subject was asked to make a decision either way. For example, one of the stories for the trait pair impulsiveness—responsibility went as follows: "A very happy young couple has the deep wish to have a child. They are cousins and have suddenly been told that there have been cases of mental illness in their family. Now they ask themselves whether they should follow their impulse or whether they must renounce it." The subject is asked how he would react in such a situation. His reactions to twenty-five other stories are then recorded (choice). Later, recall of the stories is examined, relating the

forgotten stories or decisions to the over-all reaction pattern (recall).

The trait pairs were also given in a perception test (perception) and formed part of a color-matching test. The subject was to imagine four colors of his choice, for instance, red, green, blue, and yellow. He was then asked to match each of the trait pairs to one color. Through subsequent matchings the unconscious meaning of the color could be investigated. One subject matched impulsiveness with red and responsibility with blue. In subsequent matchings he related "himself" also to blue. Thus, the following pattern emerged: impulsiveness—father—red; responsibility—mother—himself—blue (association).

All these approaches are based on the search for a functioning center in the depth of personality, which determines the individual's inner and outer perception, and is, so to speak, the nodal point holding the strings that determine the various forms of behavior.¹⁴

MOTIVATIONAL STUDIES IN GRAPHIC MOVEMENTS

The concept of a nodal point, which combines and inter-relates the various strings of behavior, leads to the concept of a unity of form and expression. Any piece of art represents such a unity. When seeing a fine painting or hearing a symphony it often seems as if the artist's expression of a certain mood and content had demanded that particular form. Unconscious self-judgments about voice, hands, handwriting, etc., are also expressions of ourselves, expressing, for instance, wishes and fears. At the same time, however, these self-judgments are longer than are judgments about other people. The measurable length of the self-judgment represents its form. Expression and form have, as observed before, a definite relationship.

These relations can be observed with special clarity in graphic movements, such as scribbles, drawings, and handwriting. They

have their origins in motor processes which, like all movements, are influenced by mental processes. From a near view, drawings have merely a representational significance, and handwriting serves the sole purpose of communicating messages with learned signs. From a distant view, however, graphic content may be neglected, whether it be a figure, drawing, or message. Then only oscillations, pressures, patterns, and their relationships will be seen.

In a painting by Van Gogh, there is perception of content (e.g., a landscape), expression (such as the violent moods of the painter), and form (that is, his characteristic style and composition). Similarly, content, expression, and form are perceived as one unit in any drawing or handwriting. From a psychological perspective, they may be analyzed separately and also seen as a unity.

Extreme psychosomatic conditions indicate unity of form and expression with special clarity. Motor control means restraint of movements. With loss of control a person lets himself go and his movements tend to increase. This has been observed by Downey⁶ and by Saudek¹² in states of exhaustion and in epileptic attacks. Dostoevski also described the epileptics feeling of tremendous ego extension when losing control during a fit. By developing a *method of graphometry* in measuring the distance between the start and end of movements, the length of strokes, and the position of graphic elements, I observed the appearance of simple mathematical proportions in this triangular scheme of relations between distance, length, and position of graphic elements. These laws of proportion, evaluated statistically, remained constant, regardless whether movement patterns increased or decreased. In one experiment, institutionalized pre-adolescent epileptic children were requested to draw a man in a seizure-free period. The teachers were then instructed to watch each child who had seizures and, as soon as he got back into the seat, to give him pencil and paper and ask him again to draw a man. In all but one of eight cases studied there was an increase in the length of features in the post seizure drawings. This was

not a random increase but was rather clockwork-like, with many lines and forms increasing to exactly twice or one and a half times the pre-seizure drawing length.¹⁵ An opposite rhythm appears in people confined to prison, where, with the general restriction of freedom, movements become restrained and contract. Here also the contraction does not occur at random but, rather, lines and forms tend to decrease in proportion.

Unconscious consistencies and symmetrical balances in graphic movements seem to reveal two basic principles of man's personality: consistency of individuality and balance of self. I investigated the consistency of movements by measurements of a person's signatures over long periods of life. For instance, the lengths of elements of the signatures of Franklin D. Roosevelt were observed to remain proportionally the same, from his first preserved handwriting specimen when he was seven years old to one of his last signatures.¹⁶

There are certain symmetries which appear with the configuration of graphic movements. When measuring the length of various strokes in a signature, particularly the length of the first, middle, and end movement, it seems that the movements are related to each other in simple proportions. This holds not only for length, as when, for instance, the last stroke is double or half the first or the middle stroke, but also for the distances between the graphic elements, which appear determined by the same unconscious proportions. Not even a dot over the "i" or after the signature is made at random or according to chance phenomena; rather, it is in a definite configuration with all the other elements. In some cases the position of certain graphic signs may be predicted exactly. In other cases the graphic movements may be too complex to allow for prediction, but the configurational principles can be discovered from the graphic sample. These configurations of graphic movement permit the diagnosis of certain psychological processes, and also provide a means of differentiating between genuine and spurious signatures and handwriting samples.

Statistical analyses demonstrate that the configuration of

graphic movements cannot be explained by chance or by "reading into" the sample proportional relationships which are not inherent in the graphic act. We observe a natural law of the organization of movements falling into a mathematical design like the patterns of a crystal. The consistent proportions are not the same for all individuals, although they follow the same basic principles. Each individual follows his own law of expressive movement.

Similar measurements applied to the scribbles and drawings of preschool children permit a distinction between rhythmical ability, measurable by an *R. Q.* (Rhythmical Quotient), and intellectual ability as expressed by an *I. Q.*¹³ Formulae of configuration also appear in the drawings of artists whose unconscious manifestation indicates centers of expression, the interrelation of ideas, and thus the unconscious intent of the artist.²³

MOTIVATIONAL STUDIES IN IMAGERY

Laws of configuration which appear in grouping processes of perception, in the relational functions of memory, and in the interdependent proportions of expressive movements, as measured by graphometry, also can be observed in the unconscious processes of dream imagery. According to the author's method, all but syntactic words are, in a mixed order, presented to the dreamer as stimulus words for his associations. By replacing the words of the dream record with the key associations, we obtain a dream translation from the dreamer himself, indicating the motivations for the choice of each dream image, as determined by a configurational scheme.²⁴

Similar processes have been observed during psychotherapeutic sessions. By recording and numbering all statements of a patient, a comparative study will indicate their organization in definite patterns revealing symbolic relationships between concepts on many levels of thought.¹³ Experiments dealing with the creative imagery of artists have noted the unconscious organiza-

tion of conscious compositions,²³ and an examination of symbolic systems of ancient civilizations showed the intricate network of lawfully interdetermined imagery.^{17, 19}

Hence, according to the new concepts of experimental depth psychology, motivational processes in perception, retention, expression, and imagination follow principles of configuration, which correspond with each other on the conscious and on the unconscious level, and which are interrelated in the unity of personality.

SUMMARY

Experimental depth psychology introduced the multiple matching method for demonstrating the unity of a person's expressive behavior. The method of obtaining unconscious self-judgments demonstrated a unity of conscious-unconscious processes. The split face method revealed the interrelationship between constitutional factors and motivations.

Experimental depth psychology's motivational studies in perception demonstrate the dependency of visual perception on emotional factors. Motivational studies in memory indicate the influence of emotional factors on recall. Motivational studies in choices (cross-road test) reveal the interdependency of processes in perception, recall, association, and choice. Motivational studies in graphic movements, based on the method of graphometry, show that the distances, length, and position of graphic elements form part of a configurational scheme expressed by simple proportions of relations. These principles of form are correlated with principles of expression as indicators of personality. Motivational studies in imagery indicate that the unconscious imagery in dreams, neurotic systems, creative processes of artists, and symbolic systems of ancient civilizations, follows configurational schemes, in which the choice and symbolization of images are interdependent.

All approaches of experimental depth psychology join in the

key concept of synthesis, applied both to the expression of personality in its conscious and unconscious manifestations, and to the unification of approaches to personality. New concepts of experimental depth psychology lead to the hypothesis that principles of configuration correspond with each other on the conscious and on the unconscious level, interrelated in the unity of personality.

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**Characterology,
Stratification
Theory, and
Psychoanalysis:
An Evaluation**

IN RECENT YEARS there has been growing up in Germany an approach to the problems of personality variously called Characterology, Stratification Theory, or the "Phenomenological Approach." A special session at the Montreal Congress was devoted to allowing proponents of this viewpoint to state their case and to enable them to demonstrate the theoretical superiority of their system to psychologists from other countries. As a discussant, the writer had three criticisms to make at that time, and the written reports presented in this volume do not make him feel that these criticisms were either inappropriate or overly severe.

STRATIFICATION THEORY

Briefly, the first criticism is that the discussion of stratification theory is extremely obscure, fails to come to a sharp focus, and leaves the reader without any clear-cut definition of the meaning of the terms used. The reader who expects to be told,

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briefly and succinctly, precisely what it is that Wellek, Lersch, and the other writers are advocating, will find it very difficult to obtain what he is looking for from their contributions to this volume.

The second criticism is one of substance rather than of manner of presentation. If the author's understanding of the theories under discussion is correct, then the position adopted by these writers seems to him to represent a philosophical belief, rather than scientific theory. Indeed, it might be argued that their position is essentially anti-scientific; a late growth of the idiographic, *geisteswissenschaftliche*, "understanding" approach so favored by German philosophers. As such it will not be easily acceptable to psychologists of the Anglo-Saxon countries who wish to treat the study of behavior and personality as a branch of science.¹ However, the writer would like to make it clear that what he has to say in this connection is always subject to the conditional clause in the second sentence of this paragraph; although he has religiously looked up all the references given and has read around the subject in the recent German literature to a considerable extent, he is not at all certain that his understanding is equal to the linguistic subtleties and philosophical undertones characteristic of so much of this writing.

The third criticism is one that has often been brought against German psychologists, and it is that in presenting their case and criticizing those holding opposite views, they tend to erect a man of straw who can easily be knocked down, rather than dealing with the actual theories presented by their opponents. This tendency was quite noticeable even among the experimentally minded adherents of the Berlin School of Gestalt Psychology; it appears in an exaggerated form among the proponents of stratification theory.

No attempt will be made to substantiate the criticism of obscurity. The reader will be able to judge for himself whether it is the authors themselves who are at fault, or whether the difficulty in understanding arises from the critic's own disabilities.

The main part of this paper will instead deal with the other two criticisms mentioned.

Let us begin with the following quotation from Wellek's contribution:• "The hope that everything worth knowing in psychology, including even philosophy, could be reduced to a system of mathematical formulae has proved a failure. It is generally supposed now that mathematics can have only an auxiliary function, however important and fruitful it may be." The reader will have no difficulty in detecting the man of straw so triumphantly knocked down. No reference is given to the putative writers who believed that "mathematics was all important in psychology," and who denied that its function, however important and fruitful, was only an auxiliary one. To the writer's best knowledge no psychologist of any standing has ever held such a belief and psychologists of all schools would agree with Wellek's statement.⁷ There is in fact no argument at all; in psychology, as in all sciences, mathematics is applied to the primary data of that science and it is these primary data which are of the main importance. Mathematical models, and mathematical methods of handling the data adequately, are obviously subsidiary to the primary data and to general theories regarding them. Wellek's tendency to make into debatable issues questions on which there is no disagreement at all and to score for his theory and debating skill a triumph over non-existing foes, makes rational argument rather difficult.

How about the first part of the quotation from his paper? Again Wellek does not tell us either who held the view that "everything worth knowing in psychology could be reduced to a system of mathematical formulae," nor does he tell us how this notion has been dispelled, or by whom. In the absence of such references, it becomes very difficult to know what, if anything, this sentence means. Obviously its point centers on the term "worth knowing," and it is here that I suspect there will appear an irreconcilable division of opinion between *Geisteswissen-*

• Chapter XVI.

schaft and *Naturwissenschaft*, "understanding" and "explaining" psychology, or idiographic and nomothetic psychology.

If I understand the German approach aright, this seems to be its main contention: We are immediately aware of thoughts, feelings, strivings, and so forth; we are also immediately aware of the way in which these thoughts, feelings, and strivings are related to behavior. This enables us to understand the behavior of other people, particularly when those other people behave in ways similar to our own. In a rough and ready sort of way, we can thus predict how other people will act, and equally are enabled to formulate certain rough and ready general rules of conduct. Primacy in all this is given to the individual's own consciousness of his experiences.

Contrasted with this point of view is the behavioristic one, which starts with observed behavior and its accurate measurement, which tries to discover invariances and formulates these in terms of hypothetical constructs and intervening variables.⁴ Introspection, if used at all, is employed merely to suggest hypotheses as to the nature of these intervening variables. It is never used as a method of proof, or appealed to in order to settle an argument. Adherents of the introspectionist point of view often point with pride to the fact that their method occasionally enables them to make accurate predictions and to give useful advice. Much of what passes under the name of psychotherapy and guidance appears to be of this nature. However, this fact can hardly be regarded as crucial. Human beings have always been able, on common sense grounds, to predict the behavior of other human beings to a reasonable approximation and without the benefit of the academic study of psychology. There is no evidence that the Catholic confessional is less efficient in preventing neurotic disorders than the most advanced methods of psychotherapy; there is no evidence that the advice of the most highly regarded introspectionist professor of psychology is superior in personal matters to that given by the busy medical practitioner, the priest, the teacher, the company commander, the nurse, or indeed anybody of intelligence who has

had a long and varied life. Indeed, the consistent failure of the characterologist's favorite tool, the interview, to make possible valid predictions—a failure discussed at length in one of the writer's books³—suggests that the claims for this method are greatly exaggerated. It is regrettable that its advocates in the pages of this volume do not go into experimental details and provide us with chapter and verse with respect to their claims.

Contentions such as these cannot be accepted on the mere basis of philosophical argument and speculation, what is required is a detailed discussion of the experimental literature on both sides, and a fair and impartial appraisal of the evidence. Thus, Wellek, Lersch, and the others have failed to do, until they take more seriously their duties of basing their conclusions on all the available evidence it is necessary to take these claims with a grain of salt. This failure to take the experimental literature into account, or even to be aware of its existence, leads Wellek to beg question after question and to disregard a considerable body of factual evidence. Thus he says 'If a correct calculation is universally recognized then a correct description should be similarly accepted. The same is true of understanding (*Verstehen*), which, in the realm of psychology belongs with description and cannot clearly be separated from it. There is no need for a single number, threshold figure, or minimal frequency, to diagnose choleric temper in an individual. It is unnecessary to know how many times a week somebody 'blows up' in order to call him 'short tempered'. Faith in the magic of numbers and measurements, which alone are supposed to constitute existence, is sheer superstition.' This argument makes assumptions which are disproved by a large number of experiments. Without going into the question of who it is who has ever supposed numbers and measurements alone to "constitute existence," we may ask ourselves seriously what the main differences are between "correct calculation" and a "correct description," and precisely why it is that the former is universally recognized, whereas the latter is not. A calculation follows certain laws and everyone properly trained can tell whether a given calculation does in fact obey

these laws or not. There is, in psychological terms, a test-retest reliability of unity. When it comes to description and "understanding" of behavior, there are no such general laws according to which judgment could be made, and the reliability of such judgments is deplorably low, so low in fact that it is often doubtful whether they have any factual basis at all.² Wellek might like to carry out an experimental study one day into the reliability with which "choleric temper" can be diagnosed in individuals; he will then have the answer to his rhetorical question about the acceptability of non-quantitative description.

By and large, then, Wellek's case seems to be built on a misunderstanding of the behavioristic position, and a disregard for factual evidence in validating his claims. But perhaps more fundamental than any of these objections is a difference in aim which becomes apparent. Wellek states that "It is the task of psychology to teach men to understand themselves and others better." This is not the aim of scientific psychology as conceived by most Anglo-Saxon workers in this field. Their aim is to explain behaviors in terms of certain general laws, preferably stated in mathematical terms, and to control behavior by varying the conditions which determine it.⁵ Changing the feeding schedule of rats in the Skinner box changes their bar-pressing behavior according to certain well understood laws; changing the amount of drive in a situation produces commensurate changes in the performance of habits learned to a predetermined degree; learning along the lines of massed practice produces inhibition, reminiscence, and serial position effects according to well known rules. It is difficult to say what role "understanding" has to play in all this, any more than it does in the determination of the behavior of electrical currents according to Ohm's law, or the behavior of falling bodies according to Einstein's five gravitational constants. If we are really concerned with "understanding" human beings, rather than with explaining their behavior, then we might very well concentrate on introspection, poetry, drama, and the other arts. This is not a scientific aim, and it does not call for scientific method. To this writer at least.

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It follows from these considerations that the type of theory appropriate for 'understanding' psychology will be quite different from the type of theory required by the explaining type of psychology. The type of theory demanded by the explaining kind of psychologist must be clear-cut, must make use of operationally defined concepts, and must enable rigorous deductions to be made and tested, its success or failure will be determined on the basis of the success or failure of the predicted consequences to appear. It will be in a constant state of revision as data accumulate, and under certain circumstances it might be completely overthrown and another theory altogether substituted for it. In other words a theory in psychology would be precisely analogous to a theory in physics in the demands made on precise statement, rigorous deduction, and experimental testing. To the "understanding" psychologist such a precise and quantitatively developed theory would be anathema. His purposes are best served by a philosophical type of speculation in which the terms are vague, ill defined, and nebulous, in which all efforts at operationally defined concepts are eschewed and in which no testable deductions of any kind can be made. Gilbert argues that the writer's own work into the dimensions of personality suggests the possible cross-fertilization between factor analysis and stratificism. This is what he has to say "Eysenck who, I believe undertook his study without any stratigraphic preconceptions nevertheless arrived at results well in keeping with some stratigraphic types." * This is true, but only insofar as stratification theory is so general and vague that it is almost impossible to conceive of any kind of experimental finding which could not be made to appear in keeping with it. It is, as it were, a huge featherbed into which any kind of person could easily be made to fit, whether large or small, fat or thin, male or female. It would be equally easy to fit the writer's results into Plato's speculative framework of the chariot driver (the ego) and the

* Chapter XIII

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⁶ Chapter XIII

two horses (the id and the super-ego). (Indeed it would not surprise the writer to learn that stratification theory claims Plato as its originator.)

All this is not meant to indicate that stratification theory may not contain certain truths. Indeed it is almost inevitable that it should. For the purpose of illustration let us construct a miniature model phenomenological-stratigraphic theory of gravitation. According to this theory there exist a large number of tiny demons (representatives of the id; inhabitants of the lower stratum) whose only mission in life is to pull objects downward. There also exist a small number of angels (representatives of the super-ego; inhabitants of the highest stratum) whose only object in life is to pull things upward. Let us further assume a natural affinity (cathexis) between demons and material objects, and between angels and gaseous objects, and we have a theory of gravity which is certainly no more untrue to the facts of the physical universe than are stratification theory and character-ology to the facts of the psychological universe. This somewhat fanciful example may be used in addition to illustrate one of the reasons why theories of the kind now under consideration will always exert a spurious attraction on many people. It is often easy to make correct predictions in terms of such theories because after all the theories are nothing but embellishments of personal experience. We know that heavy things tend to fall to the ground and that gaseous ones tend to rise; any so-called theory which embroiders on this fundamental experience will quite frequently be correct in its predictions. After all, as pointed out at the beginning of this chapter, common sense is very frequently right in its predictions, both on the physical and on the psychological plane. This is inevitable; life could not be carried out at all if correct predictions were contingent upon analysis.

to a more factual level and deal with experimental data, with problems of reliability and validity, with factual comparisons of predictions made by competing theories, these views must be regarded as philosophical speculations rather than as a contribution to scientific psychology. Although this statement may be regarded as too severe, it is quite likely that the advocates of the characterological viewpoint would themselves agree with it, in the sense that their aims are not the aims of natural science, and consequently their methods not the methods of natural science. From the point of view of the orthodox conception of science, characterology is *ultra vires*, the characterologist would presumably reply 'So much the worse for orthodox science.' At this point we must leave the argument since it becomes a problem of values rather than of fact and because the writer is ill equipped to deal with problems of this type.

PSYCHOANALYSIS

It is interesting to note how very closely much of what Frenkel Brunswik has to say about 'Perspectives in Psychoanalytic Theory'* parallels Wellek's contribution. In his chapter, "What is Wrong with Psychoanalysis,"¹ the writer has discussed at some length the criticisms which, in his view, may justifiably be brought against psychoanalysis, there seems to be little point in repeating these here. What is of interest rather is the fact that no attempt is made by Frenkel Brunswik to meet these criticisms, all of which are well known and traditional. Instead, she follows Wellek in setting up a number of straw men which are then pushed down with the use of a terrifying assortment of philosophical bulldozers.

Perhaps an examination of one or two of her remarks will indicate the logical inconsistencies of her position and her failure to come to grips with the real criticisms made by other writers. Frenkel Brunswik states, for instance, "We therefore

* Chapter IX

must agree with Freud that it is the very assumption of unconscious processes that enables psychoanalysis to take its place as a 'natural science like any other.' . . . And he remains in the spirit of the natural sciences when he stresses that 'it is possible to establish the laws which those processes obey and to follow over long and unbroken stretches their mutual relation and interdependences.'" The *nonsequitur* embodied in this argument can best be brought out by rephrasing it in terms which might appeal to an astrologer. This is what he might write: "We therefore must agree with Mesmer that it is the very assumption of animal magnetism that enables astrology to take its place as a natural science like any other, and he remains in the spirit of the natural sciences when he stresses that it is possible to establish the laws which these influences obey and to follow over long and unbroken stretches their mutual relation and interdependences." The problem is not, and never has been, whether theoretical constructs and intervening variables are permissible, but rather whether these theoretical concepts are related to fact in a sufficiently clear-cut manner to make verification and prediction possible. It is the gist of the objections to psychoanalysis and to astrology that no such empirical verification is forthcoming and that no such testable predictions have, in fact, been made. No philosophical justification for the necessity of hypothetical constructs and intervening variables is required; what is required is the factual proof of their predictive power. Frenkel-Brunswik is exclusively concerned with the irrelevant demonstration, and gives no answer whatsoever to the serious criticism.

Again, Frenkel-Brunswik agrees with Freud "that we must defend complexities of theory so long as they fit the results of observation." And again, the criticism made against psychoanalytic views is not that the theories are complex—so is Hullian learning theory—the objection is that the theories are internally inconsistent and do not fit observations. Indeed, many critics would go further and say that in psychoanalytic writing, concepts, theories, observations, deductions, and therapy are all so closely interwoven as to make it quite impossible to sort out

what the alleged "observations" are supposed to be. Again, therefore, Frenkel-Brunswik has defended a point that was never attacked, namely, the necessity for complex theories. She fails to deal with the real criticism, the lack of observations in the usually accepted scientific sense.

Frenkel-Brunswik seems to be largely unaware of the way in which such observations ought to be carried out. She says "As in the case of the unconscious, Freud pursues an essentially operational course in defining the instincts. He does so by pointing to the capacity of the instincts to 'act vicariously for one another' and readily change their objects." To the present writer it seems extremely difficult to see how "pointing to the capacity of the instincts to act vicariously for one another" can be called an operational definition of these instincts. This quotation, perhaps more than any other, shows Frenkel Brunswik's confusion of theory and observation. An operational definition requires the precise delimitation of an experimental situation, precise instruction as to what is to be observed and how the observation is to be objectified and quantified. No such references appear in Frenkel Brunswik's chapter, or indeed in Freud's work.

Frenkel Brunswik appears to try to excuse the poverty of factual verification in psychoanalysis by reference to certain complexities of relativity theory. What she has to say appears historically incorrect. The verification of Newtonian physics may appear easy to us now, but it was a gigantic feat of ingenuity in its own time, and it took several hundred years. It is true that in the general theory of relativity "the description of the operations by which the quantities involved could be measured becomes a serious and complex task. It becomes an essential part of the theory." This is just as much true of Newtonian physics, as the writer has pointed out elsewhere,¹ and it is, in fact, true of all scientific theories of any degree of generality. We must certainly agree with Frenkel Brunswik that "Psychoanalysis shares with modern physics the problem that its statements do not lend themselves to the most direct and obvious types of confirmation." This is clearly equally true of learning theory. Yet

the informed reader may note the interesting contrast between efforts of learning theorists to achieve experimental situations providing conditions for such confirmation, and the failure of psychoanalysts to show a similar interest. In the writer's view this contrast is not due, as Frenkel-Brunswik suggests, to the greater complexity of the one set of theories as compared with another, but rather to the inchoate and contradictory nature of psychoanalytic theories. The writer would be prepared to argue that psychoanalytic theory does not contain sufficient unambiguous postulates and definitions to make proof or disproof; he would consequently argue that it shares with characterology and stratification theory the position of a philosophical *Weltanschauung* and a semi-religious belief, rather than constituting even the first step to a scientific understanding of human nature. Far from agreeing with Frenkel-Brunswik that it has no rival among psychological theories as far as the range of both its evidence and its explanatory power is concerned, he would suggest that it is largely lacking in scientifically acceptable evidence, and that while it can "explain" everything it can predict nothing. It would give the writer great pleasure to rescind these strictures on being confronted with experimental evidence of the predictive value of any of the theories mentioned in this chapter. Until such evidence is forthcoming, however, it seems impossible to him to take a more positive view.

SUMMARY

The contribution of characterologists and advocates of the stratification and psychoanalytic theories of personality have been considered in this chapter and criticized on three main grounds.

In the first place the arguments presented appeared obscure and difficult to follow, definitions being philosophical and semantic rather than operational and experimental.

The second criticism was that the theories presented were

Orbits of Characterology

IT IS THE PURPOSE of this chapter to comment on European and American characterology as represented in this volume. While European characterology holds the stage, several Americans have either contributed their thoughts on the subject, or have discussed the ideas of their European colleagues tantamount to a statement of their own principles.

How may we account for this hemispheric interest in characterology? At the International Congress of Psychology in Montreal in 1954, most of us learned more about European views on character and personality than we had known before. Consequently, we were stimulated to think more critically, and hence more constructively, about the entire subject. The comparison of fundamentally divergent orientations in psychology, and of the culture-bound convictions which underlie them, exposed some of the basic issues in the study of personality more effectively than our local and internal discussions had been able to do. While the difference in basic tenets may have been as great, the contrast was muted by familiarity and habit, so that in the end the opposing view became an indispensable part of one's own. Aside from the geography of origin, however, I believe that we discussed the concept of character as suspended between two fundamental approaches in the study of man: one, speculative, intuitionist, rather subjective and qualitative, usually ori-

ented toward a global, universalist concept of psychology; the other experimental, objective, axiomatically insistent on quantification, and inclined toward mechanical models of explanation. The second approach will emphatically claim psychology as a natural science, and will treat the subject in a particularistic manner, sometimes by the compunction of method and sometimes for lack of concern with larger contexts. The global approach is rooted in Continental Europe. The new experimental-quantitative approach was largely developed in the United States and England, and has decisively affected psychological thinking there.

In order to achieve a certain balance, I have been asked to make my comments from the viewpoint of clinical psychology. But clinical psychology in America encompasses a great many viewpoints. On the most general level the term indicates really no more than a common subject: namely, the problems of clinical psychopathology. One may approach it with a variety of theoretical conceptions (psychoanalysis, learning theory, psychometric empiricism); by a variety of methods (experiment, measurement, interpretation); and with a consequent difference of aims in studying psychopathic behavior. One aim could be to demonstrate principles, another to understand a person or a state. While the term "clinical psychology" officially connotes an area rather than a perspective, it has another facet which may be relevant to the present purpose.

"Clinical" also implies an orientation toward the immediate global reality of psychological experience. Most systematic efforts in psychology have to stake out their claims carefully, and ever thereafter treat them in a kind of artificial isolation. Unfortunately, the psychologist often forgets that it was he who made the claim into an entity. Systematic investigation begins with an "As if"—as if the rest of the living context from which the experiment was culled had ceased to exist, at least for the time of the inquiry. Of course, this is not specific for psychology. Things can never be studied in their total, actual presence; the investigator would be overwhelmed.

The problem of any psychology is to what extent the reality of experience may be lost while attempting to operate within a systematic methodology. In trait psychology, for example, this problem is not faced but merely postponed by saying that men have always described each other by means of traits. Attempts to pin down what makes one man a nice fellow, and the other a nasty one, reach the same limitations as systematic psychology in its more extensive and elaborate attempts at codifying human conduct. We can comprehend the global "thus" of experience (*Erlebnis*) when it occurs, but when we wish to organize, understand, and explain it, we must split experience into artificial entities. The broader the aspects of experience, or behavior, the less do they lend themselves to the hobbling of science, making apparent the limitations which are inherent in all intellection. As a result, systematic psychology has tended to stay away from the real scope and force of experience, or has attempted to reduce it to a size with which it can cope. This has led to a peculiar situation: Psychology is not able to deal with a considerable portion of our lives, although as people we continue to be profoundly involved in just that portion. In the end we seem to have arrived at a spurious compromise, conducting our investigations as if there were really two realms of being—one of life, one of psychology. Although love, or mourning, or the complexities of a family are certainly "experience" or "behavior," somehow they are not yet the subject matter of psychology.

The purview of psychology which acknowledged the vicissitudes of life too spacious for the cubbyholes of systematic psychology has slowly become identified as "clinical." The apprenticeship of clinical psychology in psychiatric clinics and the concern with the person and his life history may well have fostered this orientation; but it was soon detached from psychopathology, and persisted as a loosely defined attitude of seeing conduct in its natural context. In this sense, therefore, clinical psychology means a psychology of the whole personality within its ordinary social settings; it means also a psychology more concerned with the functioning of the individual than with a type;

and a psychology which is not satisfied that events do, or do not happen, but wishes to understand also what they mean.

Finally, through the expediciencies of psychoanalysis, "clinical" has come to refer also to a psychology of needs. It involves distinctions between overt and covert strivings, and between conscious and unconscious motivation. "Clinical" in this sense is identified with a dynamic psychology of conflict and adjustment, of the coherence of childhood and personality development. Insofar as they are "clinical," the following comments will be oriented toward holistic and dynamic aspects.

CONTINENTAL CHARACTEROLOGIES

What then is the significance of European characterologies for clinical psychology (if "clinical" is understood rather "*weltanschaulich*" in a general sense)? There are many divergences among the characterologies reported in this volume, but they seem to fall into three major classes: Class one is philosophical and phenomenological, and encompasses most characterological work done in Germany and Holland, some French contributions, and, with modification of premises, some Italian. Secondly, there are psychoanalytic-clinical characterologies developed in Switzerland and elsewhere, apparently more often effective as an influence on systems than as systems by themselves. Finally, there are the experimental and psychometric systems of characterology, best exemplified by Eysenck's typology in England and Cartell's in the United States. As is usually the case, this classification is ideal rather than actual. Almost all the approaches to character and personality reported in the present volume contain elements from two, if not from all three of these categories.

The clinical disposition which I described before has been affected in the United States, above all, by psychoanalysis, and

organismic psychology; and by the contributions of Murray, Gordon Allport, and Werner. I am not sure that psychoanalysis plays as secondary a part in European theories of personality as would appear from the contributions to this book; at any rate, aside from Frenkel-Brunswick's chapter, it is not stressed. The issues raised by Eysenck's criticism will be treated later on.

Let us begin with the philosophical and phenomenological characterologies. On first reading, they convey an impression of a certain familiarity; their aim and purpose seem to coincide with the global clinical approach. This sense of affinity is, however, quickly tempered by the recognition of the dependence of these systems on terms peculiar to the phenomenological approach, terms alien to anyone who is not familiar with the philosophy which underlies these psychologies. But even if familiar with the premises of phenomenology, one is struck everywhere by a quality of indefiniteness and incompleteness. Of course it is only natural that these characterologies should appear incomplete; we simply have not learned enough about them, despite the skillful summaries contained in this volume. However, even if what we have learned is bolstered by information from other sources, the feeling of indefiniteness persists. To put it concretely: the clinician finds it difficult to imagine how these characterologies could be made to apply to people who have pressing personality problems and need help. He wonders how these personality theories could be used and tested clinically; that is, in direct interaction with people and practical goals. Admittedly, this would be but a one-sided test. Personality theory cannot be evaluated by its applicability alone. There are the criteria of internal consistency, or of experimental validation, on which systematic theories of personality customarily rely. When these criteria do not apply, however, and when a theory of personality still claims to comprehend the fullness of conduct, then the clinical test of such a theory seems to me decisive.

The characterologies under discussion appear to have the quality of programs rather than of developed systems. This

statement needs to be modified at once. It does not, for instance, apply to van Lennep's empirical studies with the Four Picture Test, a projective device of considerable clinical range with many differential data accumulated through extensive empirical study. A number of categories for this test were borrowed from existentialism, a rather introspective and psychology-minded philosophy. Yet in reading van Lennep's account,* although I found some of his categories as ingenious as others have found them, I still wondered how through these categories one could cope with the great variety and complexity of personality which we continuously encounter in clinical work. In the same vein, Merleau-Ponty hit upon a good expression when he spoke of man as an "*idée historique*." Psychoanalysis has not coined such an elegant phrase; instead it has developed that very idea systematically into great detail and related it securely to different aspects of personality such as abilities and attitudes.

The discovery that existentialist philosophy and psychoanalysis have points of contact is not a new one. Before the war there was a tentative and short-lived rapprochement at some places. There is, of course, a great deal more in existentialism than our samples of characterology can show. However, I could not help thinking (and this may be a somewhat parochial reaction on my part), that the propositions of psychoanalytic ego psychology would, for the most part, serve the purpose of these characterologies better. A similar impression emerged from Buytendijk's sketchy outline of a psychology of feminine existence;† some of the ideas presented tended to resemble advanced psychoanalytic formulations.‡ The phenomenological studies to which Buytendijk referred, appeared to be explorations in a very promising direction. Unfortunately, they do not seem to be systematic enough to follow up in greater detail and ascertain, through a systematic variation of conditions, what had been previously surmised. These studies are neither experiments nor systematic analyses. Yet what they convey appears to me

* Chapter XV.

† Chapter XI.

similar enough to psychoanalytic observations to preclude any novelty of their own.

The problem of phenomenological psychology does not become apparent at the beginning of an investigation. Initially psychologists may reap the full benefit of an approach which often seems to make them more sensitive to their observations, and which provides them with a more flexible attitude toward its subject than experimental psychology. If a vigilant curiosity coupled with freedom to move among ideas without restraint are desirable attitudes, then the phenomenological approach will endow its apprentices well. In comparison, the onus of the experimental-quantitative approach is commonly that of a rigidly preconceived framework. Not all research of this kind starts with a hypothesis, tests it through a set of experiments, and then proceeds to make predictions; but too often a pretense is made. Such studies are hemmed in from the beginning by an apparatus of evidence cluttering up space before it has been defined and before there has been time to decide what the scope of the study really ought to be. The roads are laid out from the start; nobody should be surprised if they rarely lead to new vistas.

The problem of the phenomenological school is with the subsequent steps of investigation. Reading Buytendijk or Wellek,* the clinical psychologist is at first attracted by the broad prospect of ideas. He gets the impression that the investigator is concerned with human conduct, and not only with a small aspect selected because it could be made to fit a favored methodology. But what next? Phenomenological studies seem to gravitate into the past or into the future. They cling to what has already been said long ago, or project into a nebulous future when the uncertainties of the method will have been overcome. The fidelity of these studies to the great tradition of Western thought has much to be admired. Both clinical and experimental psychologists could profit from a greater familiarity with the history of ideas. Experimentalism, unconscious though it may be of it, is no less a product of that history than the phenomenological approach.

* Chapter XVI.

Faith, however, tends to be indiscriminate. Not all things that have come to us from the past are necessarily wisdom. Some might have been just *obiter dicta* in their time; or the profundity which is now claimed for them may again be no more than "*der Herren eigener Geist in denen sich die Zeiten spiegeln.*" A classical concept such as Plato's chariot-team may have a deep and true meaning in one respect: it reflects fundamental questions which man has been asking ever since he began to think about himself, as well as the typical answers which he invented for his questions. This persistent sameness in itself poses a fascinating problem for the theory of psychology, and it is one of the profound advantages of a psychology which acknowledges the philosophical problems at the threshold of all sciences that it can be sensitive to the patterning of perennial questions and typical responses. (Incidentally, the anti-philosophical empiricists of modern psychology ought to know that Einstein prepared his great early discoveries not by experiments but from a careful study of Hume and Mach.) It is an entirely different thing, however, when the enduring pattern is also accepted as an enduring truth.

The most critical problems of the phenomenological approach seem to me to lie in the veridical quality of its concept and in the objectivity of its results. It is never quite clear from these writings which step has come first: observation, or the terms in which it has been couched; the concepts, at any rate, are frequently re-issues of ancient conceptual schemes. In other words, for the observer "from outside," phenomenological psychology has a pervasive quality of conceptual realism. Lersch's stratification psychology* is a prime example in point; and Gilbert's efforts at redeeming stratigraphic concepts by relating them to a great many psychological findings,† do not alter this impression. "Play (in the child) comes from the needs for activity and experience, reaching down to the vegetative intention." Or, "as Lersch has noted, fright, fear and distrust stem from drives

* Chapter XII.

† Chapter XIII.

of self-preservation; envy and malicious joy from egoism; sympathy from benevolence." These are very nearly tautologies. From another angle, such statements leave the reader with the suspicion that the function of classifying observation has been mistaken here. Naming is not yet understanding. Perhaps if there had been more, and more critical observation, while concepts might not have been arrived at so readily, there might have been more real understanding in the end.

Here then belongs the fateful attraction which classification seems to have for phenomenological psychologists. A greater emphasis on classification is understandable when one considers the philosophic roots of this approach. Depending on observation-through-direct-experience makes the drive for classification a logical consequence. The air of conceptual realism, or the belief that insight is already contained in basic concepts would induce the psychologist to put classification into the center of his scheme of things. The essence of the phenomenological method can be set forth in the following paradigm: my knowledge of *your* experiences is already contained in my knowledge of *my own* experiences. This knowledge therefore must already be contained in the classes and principles which underlie my experiences. In the language of scholastic logic: *universalia ante res!*

As noted before, the problem of phenomenological psychology does not emerge at the outset of inquiry. After the subject of observation has been stated in a general way, and after individual incidents of observation have been classified, the question arises: what next? How will the psychologist know which of his impressions are valid and which are not? In our comments on the ideas presented in this book we are, of course, constrained by the conciseness and the summary character of our sources. Hence criticism can be relevant only in terms of these limitations. With this in mind, however, it may be said that the most vexing problem of the phenomenological method in psychology appears to be the absence of explicit criteria of evidence and a method of verification. How are we to know when the ideas of

the observing psychologist will apply to most women and not only to the relatively few he observed? How can we be sure that a certain stratigraphic schema actually corresponds to the object of observation and not only to certain preconceptions, or predilections in the observer?

Later in this chapter we shall consider certain extravagant notions of objectivity which characterize and resist so much of the psychological endeavor in England and the United States. I do not propose to argue from the position of none-but-quantitative evidence of which phenomenologists seem both apprehensive and misapprehensive. Science needs to be defined much more broadly than the rigorists would have it, and psychology in particular needs leeway. As yet we know much too little about our subject to declare *ex cathedra* which method will bring it to bay. Still, the fundamental notion of science is to relate systematically and with critical objectivity that which has been observed. Without these conditions the whole endeavor would have no distinguishable meaning. Psychoanalysis, in principle, has the problem of evidence in common with phenomenological psychology; but it has the enormous advantage of clinical verification. In and by themselves, psychoanalytic propositions can be no more than plausible and consistent, although as a system psychoanalysis seems to be much more comprehensive and inter-related than any of the phenomenological psychologies. One can deride psychoanalytic propositions for their lack of proof. This is still a popular pastime. But in order to make a real show of it, one has to be protected by a complete abstinence from the experience of psychotherapy. It is the self-transcendent interaction between patient and therapist⁷ which continuously tests and modifies the basic assumptions and the pragmatic hypotheses developed by psychoanalysis.

OBJECTIVITY AND INSIGHT

Scientists need a *raison d'être* even more than they need objectivity. This serious need is satisfied to some extent by "guid-

ing concepts." Originally these concepts summed up an orientation; they clarified a central purpose in the organization of thought or a directive in the use of method. "Psychoanalytic Ego Psychology" is an example of the former; "Experimental Evidence" of the latter. As the quest for the emotional security of the group overtakes the quest for insight, guiding concepts develop into slogans. When they are sounded, a kind of group identity is achieved, redeeming the loneliness which goes with the endless ambiguity and uncertainty of thinking. A feeling of togetherness replaces isolation, and the remainder of a common spiritual trust inherent in guiding concepts may fill the scientist-monads with new strength. Guiding concepts suggest a unity of purpose and a harmony of conviction which must provide quite a relief from the discomfiting though perhaps realistic perception of reasons for dissent. Guiding concepts add an exclamation mark to the explicatory sentence which usually befits science best; but the new emphasis succeeds well in hiding the usual frailties of the scientific enterprise behind a noble rule.

Exactly in this manner objectivity in psychology had become a categorical imperative, a pure "ought" interdicting further scrutiny. When regarded impassionately, objectivity appears to mean two things. One indicates that in science a statement should be independent of the momentary interests of any single person. Objectivity in this sense is really a declaration of intention, or a postulate. It spells out a disposition for vigilance against the distortions of thinking by subjective needs and states. Since the observer is so close to what is being observed, subjectivity cannot be fully eliminated from the endeavors of psychology. Objectivity is therefore, first of all, a personal commitment. This postulate is purely formal, however, and says nothing about specific and exclusive ways of being objective. The idea of objectivity also contains a special paradoxity. Subjective distortion is not only due to subjective needs but also to the limits of information and the limitations of the instruments of observations. Every new idea in this sense creates a new era of subjectivity until objectivity has been introduced through com-

communication with others and through systematic checks. Objectivity is not identical with "correctness," "evidence," or "insight"; it is only a condition safeguarding them.

Objectivity as a postulate does not, of course, indicate in what way it is to be attained, as this must obviously depend on the method of inquiry used, which in turn is dictated by the specific circumstances of the problem to be investigated. "Objectivity" on the present psychological scene, however, has come to mean something entirely different: namely, a specific method with the implication that quantification leads to objectivity, and that objectivity is by and large identical with insight. In other words, the process of insight has been boxed into the methodology of measurement.

Gaining insight is certainly much more complex than that. It is not only dependent on the equipment available for observation at any given time, but on the bend and trend of organizing thought, on symbols and concepts. That each subject of inquiry, or each "science" imposes its own conditions upon the insight to be gained, is really no more than a tautology. Yet there is a widespread conviction in psychology that the modalities of insight must always be the same. Science, according to that faith, consists of propositions which have been tested experimentally and proven quantitatively, etc. Propositions which have not been derived in this manner do not belong to science. Thus one of the more inexpensive ways of condemning what one does not like, or cannot deal with, is to proclaim that it is "just art," and not science.

The absence of sociological and historical perspectives in the contemporary rigorism of psychology is astounding. If one had to construct a model of how science happens in accord with the demands of the rigorists, one would have to think of it as issuing ready and armed like Pallas Athene from the head of Zeus. There is, apparently no idea in the rigoristic argument of the fundamental casualness of all scientific progress. Even in our time a great deal has to happen before we are in a position to approach a certain segment of inquiry in an exact and systematic manner.

The thread of insight weaves back and forth apparently without concern for expedience. For one step forward many things have to happen in several different and disparate corners; then they have to come together somehow. E. M. Forster's magical motto, "only connect," expresses this very aptly. If we just knew how to make it happen! There are, in short, many stages in the preparation and the development of insight of which several are neither quantitative and experimental nor even very systematic. Yet there is much reason to believe that knowledge will not come about without them.

The basic questions of rigorism are usually not touched upon when rigoristic standards are propounded: Is a psychology of operational definitions and of exact methods capable of comprehending the vicissitudes of personality? Can it approximate a psychology of actual experience and conduct? That quantification should provide the only admissible standards of psychology is not a matter of course and has never been proven by anybody. It is a postulate and, like all positions of this kind, is in the end based on a personal choice. To argue that psychology is a natural science and must therefore go by the rules of the natural sciences is an innocent bit of skulduggery. It is made a little more piquant by the fact that our would-be scientists are usually more rigorous and orthodox than those with established home rights.⁴ Either psychology has to be a natural science because only natural sciences are true sciences (this is in reality an argument over status rather than science), or "natural science" has no particular meaning as there are no other sciences from which to distinguish it. In any case, these are purely verbal operations unbecoming to operationists. It would be much more profitable to call psychology a social and behavioral science since it is continuously concerned with the symbols of experience, with social systems, and with the communication of cultural norms. There is no precedent for either in the natural sciences. The alternative would be to strike out from psychology all that does not fit into a Procrustean concept of science. This has been done;² but it is neither valid nor of any help.

A favorite tenet of rigorism is to insist on experimental evidence for the predictive value of psychoanalysis. But what if all these methodological prerequisites are not compatible with the object of psychoanalysis, nor with its non-Aristotelian (Lewin) and transactional (Dewey) logic? The Platonists of the later Renaissance used to denigrate the beginning experimentalism in the natural sciences. They were convinced that worthwhile insight could only be gained from a coherent system of deductive abstractions. Unable to see that experimentation was at this point indispensable, that it would have to be concerned with particulars, and thus look relatively puny against the vast horizons of Platonic speculation, they failed to recognize the true potential of empiricism, which some four hundred years later was going to lead, at least in physics, to a fair approximation of their own ideal of a science. By now, of course, empiricism had become much more efficacious, being firmly based on a universe of methodical observation and experimentation. Yet this analogy does not vouch for the experimental method. It suggests also that the mechanical models, to which the proponents of rigorism in psychology would hold us, bear no relationship to the history and sociology of insight. Insight seems to occur in levels. One approach in science may, as Hegel so keenly observed, contain the next one in latency, which by itself may contradict and suspend the former. As far as one can see, however, in the dialectics of uncertainty each step usually turns out to have its own necessary function in the end.

UNDERSTANDING AND EXPLAINING

In his criticism of Frenkel-Brunswick's chapter in this volume,* Eysenck refers to one of his books² for his opinion on psychoanalysis at large. If we follow him there we find the chapter in question full of extraordinary misapprehensions and idiosyncrasies. It represents probably one of the most biased statements

* Chapter XVIII.

among the professional writings of our time. At the end of a string of arguments, each demonstrating the utter and unredeemable muddle of psychoanalysis, tribute is suddenly paid to Freud's genius and to the many stimulating hypotheses he has left to future investigators. Perfunctory though this eulogy sounds, another variant of that characteristic "You-must-not-think-that-I-do-not-appreciate, etc.," the reader will still be baffled as to how psychoanalysis, emerging from a cloud-bank of brazen and insane speculations, could have produced any valid hypotheses. He may be moved to wonder about the peculiar nature of science which looks askance at the disorderly conduct of psychoanalysis, but is somehow dependent on it for ideas. He may even be reminded for a moment of the philosophers of Laputa, who for the good of the on-going argument should really be quoted in full.⁶

An unmitigated negativism sometimes has the unintended virtue of bringing out in bold relief the ideological and social problems of the idea which it denies. In our case the value of criticism is limited by Eysenck's obvious disaffection for the very idea of psychotherapy and by his lack of familiarity with it. He knows psychoanalysis like a man who daily has to meet somebody he dislikes and looks away every time. Suppose then that psychoanalytic propositions are ambiguous and psychotherapy, based upon them, is dubious too. Still, if anybody suggests, as Eysenck does, that psychoanalytic psychotherapy be combined with the extinction method of the late Knight Dunlap, he has not grasped what the former is all about.

Eysenck's criticism of Frenkel-Brunswik's chapter on the scientific status of psychoanalysis is based on the dichotomy of Understanding and Explaining. The former, according to Eysenck, is distinctly unscientific, for true science aims at explaining. But what then is Understanding? If, as Eysenck says, life could not go on without it and if understanding leads to correct predictions, as he also allows, it should behoove psychologists at the very least to explain how these predictions are possible. Why should Understanding be excluded from psychology? It

is done by fiat of definition. Understanding is not psychology, but explaining is. Supposing we turned it around and said No, Understanding is psychology, and Explaining (at least as it is used in this argument) is only a stepping stone toward Understanding? Much respectable support can be mustered for this position. Dilthey, Bergson, William James, and others. If Understanding matters in life, life, one would think, might also matter to psychology, it might altogether be more practical to let Understanding be a part of psychology.

From Eysenck's and other rigorist arguments one gains the impression that only the parameters of proof are worthy of being called "science" while the status of hypotheses and theories at best remains doubtful. Science is only that for which evidence is shown. This would leave us with little science and with the task of finding new terms for the manifold efforts of man toward an orderly comprehension of the world in which he lives.

Eysenck speaks of the "overwhelming amount of agreement on the main points" concerning the definition and the standards of science on which all will agree who are acquainted with 'the writings of logicians and philosophers of scientific methodology'.² No more is said about this concourse of opinion until we find, tucked away in a dependent clause, that 'we have come to appreciate that 'scientific' truths tend to be correct because they have been arrived at by a particular method'. Scientific truths then, are those arrived at by measurement and proven by statistics. In other words, science is defined by the method it uses. I doubt very much that this definition is mandatory. It seems much more consistent with the logic of science to make it more inclusive. However that may be the philosophers whose agreement is so overwhelming are not listed. Obviously those excluded must be the ones on whom Frenkel Brunswik relies to support her argument. Among the latter, however are many of the leading men in the theory of science so that this contest of authorities ends in some confusion. I believe that on the whole Frenkel Brunswik approaches the logical problems of psycho-

analysis successfully, by means of the conceptual tools of logical positivism.* This is not the only possible and perhaps not an altogether satisfactory approach; but that is again a different question. Frenkel-Brunswik is keenly aware of the problems involved in the logical analysis of an immensely comprehensive system like psychoanalysis. Replete with new facets of experience which had been made conscious for the first time, and full of the intimation of new relationships, it was obviously improvised in many respects out of conceptual odds and ends available at the time of its origin. Frenkel-Brunswik acknowledges many open questions in her study; Eysenck tolerates none in his. He does not really talk about the same problems. There is no space to consider the dimensions of his scientific criticism of psychoanalysis any further; in terms of a pre-scientific impression it simply appears that he dislikes the whole business.

I suggested previously that intellectual orientations are in the end personal commitments. One may be attracted by the lively possibilities of the phenomenological approach, or irked by its vagueness. The logic of conflict peculiar to psychoanalysis may be as offensive to many as that of Heraklit and Hegel has been before, or it may hold out to others access to an understanding which the more orderly traditional categories do not envisage. There is no less commitment in the outline of a static, predetermined, and growth-free typology which Eysenck proposes than in phenomenology or psychoanalysis. Which system one will choose is usually determined long before all the good reasons for it are marshalled. One cannot expect, therefore, that affinity to one approach will change quickly in the face of an argument for another running counter to the proclivities of one's own. To make science approximate universality it is not so much necessary to stand on one's method but to take some effort toward understanding other people's ideas on their premises. Without it the difference between wanting to improve the common stock of insight and between venting one's own spleen would disappear.

* Chapter IX.

SUMMARY

The cross currents of this volume suggest the need for a more systematic methodology of qualitative procedure in psychology. If we assume that many if not the most vital data with which psychology should deal are not compatible with a quantitative frame of reference we are left in a quandary. Either measurement is enforced *à tout prix*, or whatever in experience resists measurement is stricken from the record and bypassed. On the other hand, those who insist on dealing with real experience and not merely with a censored and docile abstract thereof, often will not be able to get beyond an uncritical impressionism. Present day psychology, and especially the psychology of character and personality, are in want of a systematic examination of the logic of the qualitative approach. There is a great deal more in contemporary writing on the philosophy of science than psychologists have so far utilized. The problem of almost all qualitative approaches, it seems to me, is not that their propositions are uncertain; so are most quantitative ones the moment one scratches their nice numerical surface. The problem is rather that the reader does not know the degree and the conditions in the variance of uncertainty and the author usually does not know them much better. A logic of qualitative procedure would make it possible to establish, as it were, a topography of uncertainty and a grid of the conditions to which the uncertainty relates, and with which it varies.

With such a code of logic at hand the results of qualitative approaches might attain more staying power. Instead of evanescent highly personalized impressions, as they so often remain, they might become more enduring schemata for the organization of experience. Only then might one basic emphasis of phenomenology and of psychoanalysis, so often lost, emerge and become really fruitful: namely, that we must forever go back

from the words and from the repositories of accepted formulations to the immediate experience of conduct. In Rilke's words:

Do not put too much trust in books. They hold
What has been, and may come. Go grasp
What truly *is*.

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**Toward a Science
of Personality
Psychology***

THE INTENTION of this collection of papers has been to present, largely for the benefit of American psychologists, a picture of current European perspectives on personality theory. As a typical American psychologist who has read most of the papers at the time this is written, perhaps I may be forgiven some immediate personal reactions. Two stand out: the first is an experience of *déjà vu*, a feeling that "this is where I came in" to psychology over twenty years ago. The issues are very much the same as they were then, which is perhaps natural in a group of papers largely historically oriented, but what is a little more disturbing is that they do not seem to be conceived in particularly new ways. Illustrated in Wellek's and Eysenck's chapters, we are still fighting the battles of *Geisteswissenschaft* vs. *Naturwissenschaft*, of experience vs. behavior, of "explaining" vs. "understanding." We are still wondering whether character differs from personality (Gilbert), and whether both differ from the self (Zazzo). I do not doubt for a moment that these are important issues. The question I am raising is whether twenty-five years of devoted effort by scientific psychologists the world

* This chapter was prepared while the author was at Western University, Middletown, Connecticut.

over has substantially advanced our understanding of them. Could this book have been written as well in 1925 or in 1900 as today? The thought is a sobering one, and while most of us would say "No, it could not have been written then, because there are important new developments reported in it," still our "No" must be a rather hesitant one and our expectations for future development of personality study must, on the basis of the last twenty-five years, remain rather modest.

My second immediate impression probably arises from a habit of mind which has developed from reading projective protocols. It is simply that different perspectives on personality theory seem to be in part projections— e.g., the product of the author's personal and cultural orientations as well as the data on which they are presumably based. After all, trying to formulate a personality theory is very much like trying to read meaning into an ambiguous stimulus. We have very little available in the form of "hard facts" or "systematic knowledge" and yet we try to read meaning into what is available in a perfectly natural desire to make sense as we go along. But as in all projection, the result reflects as much our own motives and values as it does the "facts" objectively "out there." Thus, one could make a case for the French insistence on absolute clarity and rationality of constructs (Zazzo), the Anglo-Saxon willingness to adopt a construct or hypothesis tentatively however imperfect so long as it leads to further research (Eysenck), the German preference for polarities, for "feeling with" another person and for hierarchical models (Lersch and Wellek), etc. All these tendencies represent more or less characteristic ways of thinking about the world common in each of these cultures, as they have been described by anthropologists and others.^{15, 16, 22}

The consequences of this impression, if it should prove correct, are two-fold: first, as we become aware of our often unconscious cultural biases, we can be in a better position to control them and should be more reluctant to insist that our particular way of organizing reality is the way it is *really* organized, at least until we have gained some cross-cultural perspective. Sec-

and, we can escape the dilemma of projecting our personal and cultural orientations into our material by decreasing the ambiguity of the stimulus—in other words, by exactly the same procedure by which projection and imagination are changed in the laboratory to perception and cognition. Decreasing the ambiguity of the stimulus in this case means, of course, accumulating systematic factual knowledge about personality.

It is to the last point that I want to direct the rest of my chapter, because there are arguments running throughout this volume, and particularly in the contributions by Wellek* and Eysenck† on how we are to go about accumulating knowledge. Questions keep arising: What is and is not the legitimate concern of personality psychology? Is experience part of psychology or is it not? What about phenomenology? Are the methods of science really applicable to all aspects of personality? What are the methods of science anyway? Now many of these are big issues, issues which can hardly be dealt with adequately in a short space and which, at any rate, could be handled much more adequately by philosophers and epistemologists. So let us put them aside for the moment and ask ourselves as simply (and perhaps as simply-mindedly¹) as possible how one goes about the task of collecting systematic information about human personality. The result of such a self-examination may appear a little obvious and even naïve, but, if so, it will be all to the good, because we need to be reminded of the essentials on which we agree since we disagree about so many complex issues. Furthermore, in the course of trying to describe these essentials, we may find that many of the big issues will dissolve because they are based on misunderstanding or too narrow a perspective. What follows then might be described as a kind of naïve description of what a scientist interested in human nature thinks and does when he is acting like a scientist. For purposes of exposition, the account will be organized around three fairly traditional stages in scientific

* Chapter XVI

† Chapter XVIII

method, i.e., observation, classification, and drawing inferences about relationships.

OBSERVATION

Psychologists, like all scientists, are first and foremost naturalists. They observe people. They watch them, listen to them, record their gestures or their speech, test them, and poke into every nook and cranny of human nature, just as a geologist pokes into every corner of the earth's surface. No one doubts that psychologists observe human nature, but there are different kinds of observation. There are those psychologists who use observation only as a means of finding illustrations for various theories of human nature; but science involves induction as well as deduction, and ultimately the psychologist must always begin and return to observation to get the raw material for his science. Secondly, we must distinguish observation from non-observation. At the abstract level such a distinction may be difficult to make, but at the concrete level there are two kinds of "non-observation" which are all too common in personality psychology. The first is the hypothetical example. Our books are full of imaginary cases of sailors who do or do not keep wanting to go to sea, of children who do or do not want to keep playing with a toy car, of individuals with a strong sense of free will or this or that wish or desire, and of careful analyses of reactions of individuals to situations created in our imagination. Now hypothetical examples, of course, have a place in exposition, but they are not observation and we ought not to rely on them as much as we do, particularly since they may create problems for us which do not exist in nature. That is, we human beings are subtle enough to populate the world with all kinds of personalities which may not exist in fact. Should we worry about devising a psychology of personality for the products of our imagination? We should perhaps have a psychology for their creators (i.e., ourselves) but not for the fictional people we create.

Another kind of "non-observation" is the "secondary source," by which I mean somebody else's opinion about human nature. It is possible to write books on personality—and I fear there have been many of them—which do little more than try to present, reconcile, or show the contradictions in various people's opinions about human nature without reference to original facts. One of the worst habits psychologists have is reading (or making their students read) the views (as opposed to the data) of other psychologists. In this way we tend to become narrower and narrower in our focus, and more and more removed from the rich variety of human experience and behavior to be observed and built into our science. Again, discussion of alternate theories and hypotheses has a place, but it should be a small place until observation has given us enough facts to argue about sensibly. Otherwise, it is a case of the blind leading the blind.

A third distinction must be made between observation and our next stage in scientific analysis, namely classification. When a psychologist looks at a written TAT protocol or notices that a subject is smiling, he is observing; but when he begins to code and classify the material in the protocol, or infers that a subject is happy from his smile, he is in the second stage of analysis. There is likely to be some argument here since Wellek contends that we perceive directly not only the smile but the emotion that goes with it. If so, the perceived emotion might be considered a part of the observation rather than the classification process. Surely this is an empirical problem. It is one on which Bronfenbrenner, for example, has done research directly.⁴ He ascertains what inner state a subject is experiencing, and then checks to see whether the observer perceived it correctly. He has found so many marked individual differences in the accuracy with which people perceive emotions, that it seems clear that such perception involves too high a level of inference and classification to belong under observation pure and simple. In a given society perception of inner states is probably more often correct than incorrect, but as soon as we leave our culture strangely incorrect perceptions may result from observing expressive

behavior. For example, a friend of mine was once riding in the back of a truck with a group of Chinese soldiers in China. The road was bumpy and he kept hitting his head rather painfully on the side of the truck. Each time he did so the Chinese laughed, and he began to grow quite angry at the thought that they were amused at his misery. Later, after he knew more about Chinese manners, he discovered that their laughter signified an effort to ease his discomfort and not amusement at all. The smile is the observed fact, its classification as indicating amusement or politeness is the classified fact. These two stages in the scientific process can be separated more easily today because we have better and better machinery for recording the subject's behavior as it occurs and analyzing it later (e.g., moving picture cameras, sound recording devices), although we have always had written personal documents which also represent permanently recorded behavior.

If we have succeeded in clarifying a little what observation is and is not, what can we say about its characteristics? The first and most obvious one is that it should be complete. We are interested in all aspects of human nature, not in just some of them. Our European colleagues have frequently emphasized with considerable justification that psychologists in the United States have most often disregarded this rule. As I have pointed out elsewhere, American psychologists have had a strong interest in overt adjustment to the environment, both because they were in a new country which demanded major adjustments from immigrants and because they had had an unfortunate experience with Titchener's structural psychology based on introspective method.¹³ They also have had perhaps less interest in "inner life" because, as Knapp and the answer keys for the Strong Vocational Interest Blank have shown, scientists by-and-large are people who are turned outward toward the world and away from their inner thoughts and experiences.¹¹ European phenomenology seen in this light is a protest against the exclusive concern with overt behavior and a commendable return to observation of inner events, or to a psychology of perception in which there is interest in what is perceived as well as in how it is perceived. Thus, it seems self-

vident, that a complete psychology must include not only the observations of overt sexual behavior as recorded by Ford and Beach,⁸ and by Kinsey,¹⁰ but also the perceptual aspects of sexual experience as recorded by psychoanalysts like Freud, by phenomenologists like Merleau-Ponty,¹⁷ or by experimentalists under more controlled conditions like Clark,⁷ or Beardslee and Fogelson.²

It is to the credit of the projective testing movement that it is gradually convincing American psychologists that thoughts, feelings, and the like, as soon as they appear in a written protocol, can be subjected to any kind of methodological analysis applied to muscular responses. The kind of research reported by van Lennep in this volume is a clear example of the new tendency to treat perception or "inner experience" as data which must be studied and which can be studied profitably by objective methods. It can be argued that the restriction of observation in the United States to certain kinds of overt behavior made possible rapid methodological advances, but the time has come to make up for this deficiency, as our European colleagues are urging, and to open our eyes to a whole class of data we have ignored until fairly recently.

The data produced by observation must not only be complete, they must also be public. The reason for this requirement is that through long and hard experience we have learned to distrust private data, data which no one else can observe even indirectly. For example, when a person coming from a seance with a medium states that there was a spirit present and enumerates the data to support his conclusion (table-tipping, astral voices, perhaps ectoplasm), we say that his judgment or conclusion is public but his data are private, especially if no one else saw and heard exactly what he did. It is useless for him to appeal to his honor or his proven honesty in the past, because as psychologists we know too much about man's ability to deceive himself even when he is consciously and habitually honest. We ask that the observations be recorded in a form for others to perceive so that perhaps a different inference can be drawn from them. The virtue

of modern recording devices is far greater than a "mere" improvement in technique; they permit us to study what happened after the event under optimal "viewing" conditions. We can cheerfully discard our old requirement that two or more persons should have observed a given event before we accept its existence, since that was never a guarantee of good recording anyway. Two people may be harder to fool than one, but there are many instances when they have been.

Unfortunately, a great deal of personality psychology is not based on public information. When a Rorschach expert or a graphologist looks at his material and draws conclusions or makes predictions about the person's behavior, even though those predictions may be correct, he may not be able to tell us on what cues he was basing his judgment. To this extent the data are not public. When a psychiatrist comes from an interview with a patient and draws inferences about the subject's state of mind, he, too, may not be able to specify correctly what actual responses of the subject he was using in order to form his judgment. It is for this reason that in recent years there has been so much stress in the United States on recording of psychiatric interviews, so that other people would have access to at least some of the data (only the verbal part, to be sure) on which the psychiatrist bases his conclusions. We have learned that no matter how honest, or how "objective" the psychiatrist (or psychologist) is, he is still a person, a product of his culture, and will tend to see in the interview to some extent what he expects to see.⁸ It is only when other people have a chance to see the same data that the opportunity for real science begins. Naturally I am not contending that intuitive syntheses of many implicit cues in an interview have no value. They are the very essence of clinical practice without which the world would be a lot worse off. They also may provide an absolutely essential preliminary to discovering the categories of classification and their interrelationships to be used in coding and relating the data. I am for the moment considering the interview only as it provides observational data—in other words, in respect to the first step in scienti-

sic analysis, and not to the second and third steps treated later.

This brings us to the criterion of repeatability of observations which has led to much lively disagreement from Lewin¹² down to Franks* and Wellek† in the present volume. Repeatability is not a primary requirement of scientific observation. There are occasions when repeatability is not necessary and other occasions when even though it occurs, it does not establish the existence of an observed datum. When a subject writes a story containing achievement imagery, rubs his nose with his left hand, fails for a moment to remember the name of his best friend, gets married or commits suicide, each of these events, if properly recorded, is a fact and does not have to be repeated in order to be considered "reliable." If the second time around he does not write a story containing achievement imagery, or fails to rub his nose, or whatnot, each of these is a second fact to be placed alongside the first and having equal standing in whatever inferences are subsequently to be drawn. On the other hand, even when the average rating of ten judges on a person's sociability can be reliably repeated by obtaining the average rating of another ten judges, the status of the resulting "observed fact" is uncertain. Is it a statement about the subject or about the cultural and personal orientations of the judges? It is, of course, a mixture of both and is not, therefore, a primary observational datum of unambiguous meaning.

Repeatability does have some virtues, although it is neither necessary nor sufficient to establish an observed fact. It is frequently invoked when data are private. The psychiatrist whose opinions about a patient based on an interview are doubted, may very well say "Well, you go and see for yourself." If the doubter then also interviews the patient and comes to the same conclusion, we sometimes feel more confident that the original observations were correct. But, of course, our confidence may be unwarranted. We still do not know what the data were, and the second person may be influenced by the same prejudices as the

* Chapter IV.

† Chapter XVI.

first, and therefore see the same things. Repeatability is no substitute for making data public. On the other hand, repeated data may provide an easier basis for drawing inferences. If a subject repeatedly tells stories with achievement imagery in them or if he repeatedly rubs his nose, we may feel that these facts have more importance for drawing inferences about the subject's personality, although this will not always be true. Also, it is correct to contend that if we repeat exactly the conditions of observation on a person who has not been changed by the first observation in any relevant way, or who is identical to the first person observed, we ought to get the same result. The assumption of similarity of people and conditions holds approximately enough, however, only so long as we are dealing with relatively peripheral phenomena such as conditioned responses, certain cognitive phenomena, or perhaps even some emotional and motivational aspects appropriate to people from the same culture. In other instances it may be impossible to duplicate the original conditions of observation even on the same persons since they were a relatively unique combination of circumstances. This should not dismay a psychologist any more than it dismays an astronomer to observe a particular comet in a particular constellation only once. The need for repeatability of observations or "test reliability" has been greatly exaggerated by American psychologists, who might better be emphasizing the need for public observations.

Observation should also be systematic. As psychologists we may start out by being naturalists, simply observing the stream of behavior or reported experience as it occurs, but we soon find that this is inefficient. Some types of behavior occur so rarely in the natural order of events that we take steps to elicit them artificially by certain critical test situations. Psychological tests may be considered attempts to sample thoughts or behavior more or less systematically. Like chemists, psychologists want to develop critical tests so as to determine which of several characteristics a person has, a determination which might be quite difficult or even impossible to make simply by observing the natural stream of behavior.

CLASSIFICATION

It is really artificial to separate observation from classification because the two are so inextricably mixed together. Language itself classifies experience and different languages classify it in different ways.^{5, 21} Thus, when the subject reports an experience or a percept, however naïvely and incompletely he may do it, he is organizing his experience in terms of the language categories he is using. Similarly, when an observer reports on the behavior of a subject he too has begun a kind of primitive classification of the raw sensory data. Nevertheless, the scientist differs from other observers of human nature in that he tries to make his categories and classifications conscious, economical, and rationally related. A poet also observes human nature and describes it sometimes eloquently, but the goal of economy is seldom his. The scientist wants to account for as much of behavior as he possibly can with the fewest number of constructs. He must avoid two extremes: on the one hand, he must avoid multiplying his constructs to the point where they represent very little improvement over simple descriptions of the raw data on which they are based, and on the other hand, he must avoid having so few constructs that they will explain everything in general and nothing in particular.

Where does the scientist get these good categories? To begin with, he may get them from some existing view of human nature which is part of a conscious theological or philosophical system of thought. He might, for example, begin with the seven deadly sins and decide to categorize behavior in these terms. None of the psychologists in the present volume has shown any tendency to use theological categories, although they were at one time in very common use. Where, then, do our concepts come from? One interesting possibility is that when psychologists gave up using theological and philosophical categories for describing human nature, they slipped back into using more or less unconscious categories derived from the culture in which they happened to be living. Thus, when LeSenne decides to categorize character

in terms of emotionality, activity, and primary and secondary "ramifications," he may not be telling us anything about the psychology of personality, but a good deal about the social psychology of the French people and the way in which they tend to perceive human nature.* When Gilbert reports that phenomenological research showed Lersch that one of the two basic themes of "the orectic intention" is that of "being an individual,"† we cannot properly evaluate the conclusion until similar phenomenological research has been done by individuals outside our Western Christian tradition which has so stressed the importance of "being an individual." I am not arguing that Lersch or anyone else consciously selected his inner experiences to fit a Christian preconception: it is enough for my case to stress the fact that any person growing up in Western culture must have absorbed the stress the culture places on "being an individual," whether or not he accepts this value consciously or is a practicing Christian. To make the point as vividly as possible, would skilled phenomenological research by a monk at a Tibetan lamasery yield the same basic theme? Perhaps. Knowledge of the lesser stress that Buddhism puts on the importance of being an individual at least suggests that the source of this category for describing experience may have been the Western Christian background of the psychologist. It may still be a good category for describing the strivings of Western man, (in fact, Nuttin's analysis and my research on the achievement motive¹⁴ stress a similar dimension of personality), but we ought to be cautious about universalizing the categories which describe our experience quite naturally, without carefully considering whether we can legitimately do so in cross-cultural perspective.

To take an even more concrete example, many contemporary German psychologists, including several of the authors in this volume, stress the importance of the concept of will, presumably because it is a useful way of categorizing many of the observations which German phenomenological researchers make. Curi-

* Chapter VI.

† Chapter XIII.

ously enough, the concept of will or will power, although common enough in folk psychology in the United States fifty years ago, has disappeared without a trace in contemporary scientific psychology in the United States (although it is creeping back incognito as "ego strength") Part of the reason for this disappearance undoubtedly lies in the fact that American psychologists have not been doing the kind of perceptual research which necessitates the use of such a category, but another reason may lie in differences between basic American and German character structure In a recent questionnaire study in our laboratory comparing the attitudes of German and American youths around eighteen years old, the following two items were viewed very differently by the two groups

"It is better to go without something than to ask a favor

' If you get bad news, it is better to hide what you feel and behave as if you didn't care'

In both cases the German students agreed much more with the items than did the American students The differences were large and highly significant statistically Unquestionably the Germans felt it was much more important to control oneself from within, to exert oneself to prevent perhaps natural but weak and dependent attitudes from appearing Such a value placed on self-control would almost certainly stress the subjective experience of exerting one's will more among Germans than among Americans Should we then be surprised that German psychologists talk about such a concept much more than American psychologists do?

These examples have, of course, been chosen at random It would be just as easy to show how certain favorite American constructs like adjustment and frustration of adjustment, as mentioned by Ellenberger,* have perhaps been derived from the necessity of so many new Americans to adjust to a strange environment Instead, let us look for a moment at another way in which categories for organizing data may be arrived at more or less

* Chapter III

unconsciously. In the United States it has been common for the psychologist to abdicate his position as a source of categories (because perhaps he has been more suspicious of his own biases), and to work instead in terms of the categories chosen by the man in the street. As good democrats should (!), Americans reject the unconscious biases of the judge (the *élite*) in favor of the unconscious biases of the masses or our subjects. For example, suppose one had the task of defining the category "psychologist." The chances are that American psychologists would never attempt to do this theoretically or analytically for fear of injecting their own biases and own personal experience into the definition at which they arrived. What would they do instead? They would probably adopt some social definition, say membership in the American Psychological Association, and then go out to discover the characteristics of such members as compared with men in general. This seems like a more objective procedure because one can say exactly how these people called psychologists behave differently from other people who are not called psychologists, and apparently nowhere has subjective judgment entered into the definition of the category. Of course, such a conclusion simply involves self-deception, and the quickest way of showing it would be to repeat the experiment in Russia or perhaps in Germany. There, it is reasonably safe to predict, we would discover that people called psychologists would behave and think in different ways from those called psychologists in the United States. And we still do not have a stable definition of a psychologist. In other words, the categorization formulated by public opinion or people in general is no more nor less subjective than the categorization of individual judges. In both cases the categories often reflect the more or less unconscious value assumptions of the culture. Let me repeat that it may be worthwhile to know by this device what the value assumptions of the culture are because such knowledge contributes to social psychology, but it is not the ideal approach to finding categories for describing human personality.

How then should we arrive at our categories? In a sense, there is no way to answer such a question. How did Newton arrive at his categories for handling physical phenomena? How did Mandelejeff and Meyer arrive at their classification for the periodic table of elements so useful in chemistry? There are obviously no rules that one can lay down. Ultimately it is a matter of genius or luck or both. However, there are two immediate or practical criteria which will at least indicate whether a category *once chosen* is of any use or not. They are suggested in the following quotation from van Lennep's contribution: * "A theme is any part of a protocol content which can be isolated, has a satisfactorily high reliability of scoring, and occurs with significantly greater frequency in one well-defined group as compared with another." He is speaking here, of course, of the "theme" as a method of categorizing story content, but what he says can be generalized. The first criterion he suggests is coding reliability. By this is meant: is the category defined in such a way that statements in a protocol (or any other type of human behavior) can be reliably classified as belonging under the category by different observers? For example, if "will" is to be one of our categories, what statements, associations, reports of experiences, perceptions, or actions, are to be included under this category and which ones excluded? The process of refining a construct or method of classification so as to produce high reliability of coding is an extremely difficult one to do well, but it has a very salutary effect on categories which otherwise would remain vague and fuzzy with indefinite referents. From long experience we know that the simpler the category, the easier it is to get high coding reliability, but we must not be misled by this criterion alone, because the simplest and most easily coded categories may be of least importance. For example, a library uses many devices for classifying its contents which are of no value or importance for ordering the psychological universe. Unfortunately, many systems of content analysis³ are based on "library-

* Chapter XV.

type" categories which do no more than classify the data according to some system which allows easy reference, but which is based on peripheral rather than key aspects of the data.

The question of importance brings us to our next criterion which I prefer to call relational fertility. It is what van Lennep is referring to when he states that a theme should occur "with significantly greater frequency in one well-defined group as compared with another." If a theme or category varies from one group to another, it is variable, and if you measure it, you can begin to make predictive statements about it, such as that it will occur more frequently under some conditions than others. It is for this reason that a category should have the middle-level complexity referred to above. If it is too broad, such as "uses words," "moves," or "acts like a human being," it may be of very little use in predicting individual or group differences. If it is too specific, such as "name begins with O," "scratches his left ear," or "time spent eating," it may be useful for describing only the particular fact in question and may not be related to anything else. For example, for a long time it could not be found that a movement response to a Rorschach inkblot was related to anything else. It is true that those most intimately connected with the Rorschach technique insisted that it was a sign of creativity, but every attempt to relate the presence of such a sign to other types of creativity in artistic or scientific spheres resulted in failure.^{19, 20} It could be coded reliably enough, but it was not a relationally fertile category. However, Barron has recently shown that movement responses on the Rorschach are related to perceived or judged creativity,¹ a fact which tends to clear up a mystery. On the one hand, we now have a basis for understanding why people who work with the Rorschach felt that such subjects were high in creativity, and on the other hand, we can understand why no relationships had been found between movement responses and creative performance, since there is no necessary connection between people who are perceived as creative and those who are creative performers. In other words, at least in this culture, the cues we are responding to when we make a

judgment of "creative" are not necessarily associated with actual creativity. Now, after Barron's discovery, the movement response on the Rorschach has some relational fertility—it tells us which people will tend to be perceived as creative and this may be a useful thing to know.

The important thing then about a construct seems to be the number of other constructs and their operations to which it can systematically be related. In other words, we ask of each new construct proposed for describing personality: what will it do for us? or, in American slang, how much 'ice will it cut'? Ultimately, of course, its relationships to other variables should form a systematic theory involving precise statements of relationships among various constructs. Psychology seems a long way from this distant goal at the moment, despite some learning theorists' attempts to get there in a hurry.

Contrasting emphases on the relative importance of the two criteria of coding reliability and relational fertility are nicely illustrated in a purely American frame of reference by the current split between some social anthropologists and social psychologists. The latter strongly emphasize what can be coded easily with the result that many of their studies of small communities are curiously "flat" and lacking in interest, as if they had left out many important variables.^{6, 10} On the other hand the anthropologists work hard to find or isolate the important constructs needed for description even if they cannot code them too reliably. A somewhat similar split appears to exist between European and American personality theorists. There is of course no reason why a really inventive scientist cannot work with concepts that satisfy both criteria.

There may be a clue here on how one goes about finding a relationally fertile construct, a clue which helps a little more than just attributing it all to luck or inspiration. The social anthropologists in question typically place great emphasis on immersing themselves in their data—interviewing sensitively, observing spontaneous behavior frequently, reading cultural products living for weeks with a primitive people. Out of all this come their

constructs—their variables in terms of which they propose to describe the culture—and by and large they seem to be fertile, important variables. Personality psychologists can do likewise in dealing with individuals: they can “soak” themselves in the data, as it were; then they can form their constructs; and finally they can begin to refine the definitions of the constructs until coding reliability can be obtained. It is this last tedious yet absolutely essential step—the step with which American psychologists often begin instead of end—that all too often both social anthropologists and characterologists omit. Having discovered the variables, they do not then proceed to develop ways of coding them reliably and relating them systematically.

The discovery process can also be aided by using the *group differences method* recommended by van Lennep. It is particularly valuable if applied to different cultures. As our discussion has frequently demonstrated, one of the most serious weaknesses with contemporary personality psychology is that it is almost entirely culture-bound. We think as psychologists in terms of the way our culture organizes experience. A really useful construct is one which will reflect variations in cultures, but which is sufficiently general to apply to personalities that appear in any culture. Another variant of the same approach is to focus one's attention on categories, the contents of which can be influenced by experimental variations. For example, for a long time psychologists have been interested in defining more precisely the categories of sexual symbolism originally outlined roughly by Freud and others. One of the more powerful ways of arriving at such a category definition is to arouse subjects sexually and compare their fantasies with those of subjects who are not aroused sexually.^{2, 7} By close comparison of the two types of imagery, it is proving possible to refine the definition of what constitutes sexual symbolism beyond what years of psychoanalytic practice have been able to do. The reason is that the experimental method is a more powerful analytic tool than simple observation of thoughts and images as they occur. The best way to be convinced of this is to try it. What happens is that one begins with

the most subtle, the most profound analyses based on clinical observation as to what constitutes symbolism only to discover that these categories do not really capture the essential differences in imagery between a sexually aroused and a sexually unaroused group. They can then be refined until they do. In short, clinical experience helps produce the categories, experimentation refines them until they can be coded reliably and until they accurately reflect experimental variation or, to put it in another way, until they show some relational fertility—some tendency to be related systematically to other events and responses.

The relational fertility or importance of a personality construct has become confused, especially in America, with the concept of validity. Validity, properly understood, is simply an example of relational fertility in which one of two types of behavior is for some reason considered more important than the other. While in certain practical human engineering situations it may be true that one type of behavior seems more important to us, usually because we cannot measure it directly, there are no more or less important behaviors at the theoretical level, and the concept of validity should not really be used in this sense. When we say that a test is valid because, for example, it gives a score which correlates with clinical estimates of the degrees of a trait which people possess, what we are really saying is that behavior A (the way a person answers a test) is related to behavior B (the way the person is perceived by a judge). The perception of the judge is not theoretically more important than the answers of the subject, so that even if the latter does not agree with the former, we have no reason to throw away the subject's answers as "invalid." They are still perfectly valid behavioral data and the only legitimate thing we can do is to decide that we have not yet found a way of classifying them which is related to anything else, and consequently choose to work with other data or other ways of classification which will yield useful relationships. We should talk of more and less important variables in terms of the number of other variables to which they relate. Strictly speaking, there are relationally fertile or relationally infer

tile constructs, and not valid or invalid constructs, and certainly not "invalid" behaviors.

Do we have to count in order to arrive at an important method of classifying data? It is at this point that Eysenck and Wellek appear to have misunderstood each other in their discussion in the present volume of how to decide whether or not an individual has a choleric temper. Wellek argues that you do not need to know how many times he blows up a week in order to make the classification, whereas Eysenck states that judgments are notoriously unreliable unless you do know exactly such things. In a sense they are both right and both wrong. From the point of view adopted here, setting up the category of "choleric temper" and deciding whether a particular instance of behavior falls into that category is an act of human judgment and does not, of course, involve counting in the ordinary sense of the term. It is exactly similar to the procedure followed by van Lennep in setting up a category of "themes of contrast" and deciding whether a particular section of a protocol belongs under that category, or by rat psychologists in setting up a category of "eats a pellet" and deciding that a particular animal has performed this response. Needless to say, the ease and success with which such an act of classification can occur depends on how explicit the criteria are, so that any attempt to set up a definition that would enable you to classify individuals (as opposed to episodes) as choleric would have to involve many simpler discriminations, among which would undoubtedly be frequency of choleric episodes. For it is also correct to say that making a decision as to whether or not a particular event belongs under a category is a presence-absence or 0-1 distinction which is the basis of all systems of counting. In other words, if you can classify reliably, you can also count, and why not count since it gives you added information? For example, to count is the best method of answering such questions as: How many themes of contrast are there in this person's protocol? How choleric is this individual? There may be objections on the grounds that counting the number of instances in which a subject shows behavior which we classify

as choleric is not a very important way of judging how choleric he "really" is, since a judge is in a much better position to synthesize a variety of cues into a more adequate over all estimate of the intensity of his "choleric temper"

Since just such considerations have led to the spread of the worst curse of contemporary personality study—namely the *rating scale*—it may be worth examining them a little more closely. It is precisely because the judge synthesizes many unknown factors in his judgment, that the estimate he makes, no matter how precise or quantitative it may be, is practically useless as far as the development of basic science is concerned. Perhaps an analogy will make the point clearer. Suppose we want to know how hot it is outside today. We could collect a number of judges and ask them to estimate the temperature on a thermometer scale. We could probably get a fairly high degree of agreement. The judges would be reliable in their estimates. Then suppose we compare their average judgment with the reading on an actual thermometer and find their average judgment is too high. If we contend that the thermometer is right and the judges are wrong they might very well reply that this is not so because the thermometer could not take humidity into account and they could. Therefore, they might continue their judgment is more valid because it considered more factors. Their reasoning is undoubtedly correct in one sense, and it is often the basis for the resort by personality psychologists of all persuasions to clinical judgments for obtaining basic facts of supposed utility for further analysis.

Why then do physicists and other natural scientists continue to use thermometers rather than human judges if the latter can make "better" estimates? There are several possible answers and all of them would seem to apply equally well to the study of personality. One is that physicists have found it useful to restrict their attention to the variable accurately reflected by a column of mercury, and that if they want to measure temperature they measure that separately, and then combine the two measurements if they so wish. Another is that the judgments of individuals tend

to take more than one variable into account; they are unreliable because they are often influenced by past experience or other characteristics of the judges. For example, from the time of Aristotle we have known that judgments of temperature will depend on the temperature to which the person was exposed just before he makes his judgment of the new milieu. If all our judges had just been in an air-conditioned room before making their estimates of the temperature outdoors, their average judgment, while still reliable, would deviate even further than usual from the reading on the column of mercury. So the physicist prefers his column of mercury, however "insensitive" it may be to such things.

In the personality situation the judge is even more influenced by his background—e.g., his experiences, his culture, and his own personality structure. Nowhere is this more true than in judging intensity of a characteristic in another person. If a judge is allowed to make a rating as to how intense a person's achievement motivation is from reading a protocol, we know that his answer will depend on his own achievement motivation, his experience with extremes in this dimension, his statistical sophistication, his cultural background, and all sorts of other factors that influence the standards in terms in which he makes the judgment. Therefore, as van Lennep points out, a simple count of frequency at least gives us an objective measure of something which is not a hopeless mixture of a variety of unknown cues to which the judges are responding, plus a variety of personal and cultural factors influencing this judgment. We accept the fact that such a measure is insensitive because it does not represent a synthesis of cues, just as a physicist accepts the fact that the thermometer reading is insensitive. In short, personality psychology would be a lot better off if psychologists would throw away their rating scales for intensity of variables and would stick to classifying and counting.

Another well-worn issue in this area is whether the classifying observer and the subject observed can be one and the same person. In other words, can a person observe his own perceptual

states and classify them into whatever categories he has chosen for purposes of analysis? Again let us bypass some of the thorny theoretical aspects of this question and look at it practically. So long as an individual is simply reporting on his states of consciousness as accurately and naively as possible, more or less as current phenomenological research demands, he is providing us with primary data which is of basic importance in building a science of personality. He is, however, telling us something about himself, about his attitudes, his values, his way of looking at the world, and he should not automatically assume that he is telling us something about the subjects or objects which he is perceiving and their characteristics. That is, the categories he chooses to describe his experience naively are not necessarily the categories psychologists as scientists find most useful in economically describing a variety of such experiences. For example, to judge by much of the writing of German characterologists, many Germans report from phenomenological investigation that the expressive behavior of another gives them an immediate, direct perception of the inner state of the other person, so that, in Wellek's terms, "in expression the inwardness appears outside." This is a primary observational datum of considerable importance. It tells us something about the way some people—perhaps Germans particularly—perceive other people. It is not, however, a statement about scientific methodology nor about what is really happening in the phenomenological field of the other person. The German psychologists may have taken an important aspect of their inner experience of other people and elevated it to the level of a scientific category, that is, to a method of getting at the realities of personality. It is, of course, with no special wish to criticize German psychology that I have chosen this example. The American insistence that only action counts is another example of elevating categories of phenomenological experience to the level of scientific constructs. In short, the danger of categorizing one's own experiences is that, because we are acting as scientists when we do the categorization, we tend to generalize and universalize our inner personal experience far beyond what we would do if we were

dealing with another person's protocol. We are prepared to deal with another individual's reported experiences as a projective system, but it is really difficult, if not impossible, to do this with our own. So, for what may turn out to be purely practical reasons, it is better not to categorize observations on one's self, at least not at the time the observations are being made.

INFERENCES AND RELATIONSHIPS

After the data have been collected and coded, the next step is to test our coding system by checking to see what empirical relationships there are among our various categories. In other words, it is part of the economizing task of science to make "if a, then b" statements. There is no need to review all the methods by which psychologists and other scientists have learned to make and check such statements. Let it suffice to repeat some of the things Franks has already said on this point: statements of relationships should be explicit and precise enough to be testable, and they should follow the ordinary rules of logic. It is certainly correct, as Franks suggests, that if for logical reasons or for lack of precision there is no possible way in which our hypotheses could be proved wrong, we are not entertaining scientific hypotheses but articles of faith. Applications of the rules of statistical inference are simply instances of applications of general rules of logic, and anyone who objects to statistical inference is basically objecting to logical inference. It is true, of course, that statistics like logic can be applied in the wrong way or to unimportant problems, but this seems no reason for objecting to statistics as such. It would be a little bit like objecting to figures because liars can figure. It is also worth emphasizing that statistics are used primarily at the third stage of the scientific process. They certainly do not provide the basic observational data (stage 1), and may wrongly, in many instances, determine the form in which the data are collected, though they are of great assistance in helping organize or "lay out" the primary data in tables

once they have been collected. Anyone who has spent as many hours as I have recently poring over a volume like Heichelheim's *Wirtschaftsgeschichte des Altertums* would easily be convinced of that. Here there is a profusion of primary data, each fact described in loving detail, but it would take hours of work to organize them in a form that enables one to see what is there, what is missing, etc. One cannot help wishing for a few old-fashioned summary tables. Furthermore, statistics also do not tell us what categories to use (stage 2) for the classification of data. What they will tell us is whether the categories we have chosen are relationally fertile, whether they lead to many relationships (stage 3).

It may seem almost unnecessary to say so, but obviously the rules of logic and inference apply as much to facts collected on a single person as they do to facts collected about groups of people. They apply as much to single instances of behavior as they do to repeated instances of the same kind of behavior. Thus one can predict by an explicit and precise chain of logical reasoning, based on various test results perhaps, that this individual will fail if he follows a pre-medical course. The only practical rules we follow are that we make our prediction in advance of the actual failure, to avoid our unconscious tendencies to rationalization after the fact (no matter how honest we are), and that we state the rational basis for our prediction explicitly and precisely. If we do it intuitively on the basis of a synthesis of various clues, we may build a great reputation as a "seer" but we are not contributing directly to science.

What then is the virtue of group research for personality study, since it will never tell us anything about a particular individual? The answer is that it is largely group research which provides us with hypotheses about relationships among variables in any given individual. For example, our own research on the need for achievement has practically all been group research.¹¹ It has demonstrated that subjects who are high in *n* Achievement, as contrasted with those who are low, are more likely to work harder when not under pressure on complex learning tasks, to

have had mothers who stress independence training, and to show an interest in certain risk-taking enterprises largely centered in business occupations. Since we know that these relationships exist, at least among American subjects, when we find an American subject with a high π Achievement score we feel safer in hypothesizing that he had such and such a kind of mother, that he is likely to be interested in business, and that he is likely to work harder in certain situations than we did before the research was done. These are still only hypotheses, of course, which have to be checked in the individual case, but we certainly have a firmer basis for making them than before.

SUMMARY

The position taken in this chapter is that much of the current controversy about personality is a waste of time, including perhaps my own rather naïve attempt to simplify matters. What we should be doing is collecting our data, classifying it, and attempting to establish relationships among our categories and classifications. Instead we are lazy about collecting data, being satisfied all too often with a lot of cues picked up unconsciously in a depth interview with someone else or with ourselves. Our categories for classifying the data come from our own personal or cultural experience, yet we insist that they are universal. And rather than spend our time checking the relationships of our variables by recognizable methods of logical inference, we prefer to state them in such a way that they could not possibly be wrong, and to enter into debates with other psychologists who have followed this same procedure but who have unfortunately come to a different conclusion. Much of the debate, since it is not based on carefully accumulated facts nor on an attempt to consider different cultural world views, appears to have the character of the clash of projective systems, which means, of course, that no resolution of the disagreement is possible. If American psychologists insist that man is very like a rat and

European psychologists that he is very unlike a rat, can this issue be resolved? Certainly not by science. It is a question of differences in cultural values. What science can do, of course, is work out in great detail in what ways man is like and unlike a rat, but the emphasis which a person or a culture puts on the like and unlike parts is still a question of ultimate values. Is it the business of science to worry about such issues as free will and determinism, explanatory vs understanding psychology? No, not really. There is nothing in the description of the scientific process which necessitates our taking a particular stand on these issues as psychologists, even though philosophers of science may try to force us to worry about the implications our procedures have for such matters. They want to classify us as operationalists, or positivists, or idealists. They can and should because that is their business. Ours is to get some kind of a science that is worth worrying about. It is true that we are also human beings as well as scientists, and that we cannot help wondering sometimes about ultimate questions, but as scientists we should give such speculation a back seat while we are busy about our primary concern which should be to collect facts, categorize them, and find relationships among our categories.

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Resources

**Selected Annotated
Bibliography**

THE END OF THIS VOLUME seems an appropriate place to offer the reader a potential means of seeking his own perspectives. The Selected Annotated Bibliography is an attempt to compile pertinent international references not otherwise readily available. Preparing it involved three major problems: what to select, how to annotate, and how to arrange references in meaningful classifications. To keep within reasonably manageable proportions, it was decided to limit the bibliography to mainly post-1950 publications. Annotations were held brief, non-critical, or omitted entirely when the title or subtitle described the content fairly specifically. Wherever possible, cross references to the *Psychological Abstracts* and critical book reviews were included.

The classification system is a rather arbitrary one reflecting the compiler's biases. The initial section, *International Psychology*, incorporates general references, dealing with the work of colleagues in many lands. Section II, *Surveys of Personality Theories*, cites both specific review articles and pertinent texts, including some published before 1950. Section III contains *Contributions to a Systematic Theory of Personality*, ranging from physiological approaches to theoretical models. Section IV, *Personality Evaluation*, concludes the bibliography.

Despite excellent library facilities and the helpful counsel of contributors, there are no doubt many important omissions, particularly in the non English language area. Not all the material

The bibliographic material was compiled while the author was on the staff of the Western Psychiatric Institute University of Pittsburgh School of Medicine

could be read in the original and some annotations were derived from secondary sources. Additional annotated references, corrections, revisions, and further comments will be most welcome for future revisions.

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**A Note on the
International
Congress**

THIS VOLUME IS A CHILD of the Fourteenth International Congress of Psychology, which convened in Montreal in June, 1954. It was actually conceived during the week of the Congress, and its gestation and birth have been under the surveillance of psychologists who were active in the planning and direction of the Congress sessions. The Proceedings of the Congress have already been published,³ and these bear witness to the high level of the contributions to the various sessions. During the Congress one repeatedly heard the lament that many of these distinguished papers might be lost if they were to appear only as abstracts in a volume of Proceedings. Since each session represented a serious attempt to assess the present state of fact and theory in a major field of psychological inquiry, virtually every one would justify a published volume. Fortunately, several sessions are being reported in the UNESCO bulletin,¹ and others will find their way into standard psychological periodicals. The present volume represents the attempt of an outstanding group of personality theorists from different countries, most of whom participated in the Montreal meetings, to think through the problems of the theory of personality.

The occasion merits, perhaps, a few words about the organization of psychological research on an international level, and about the idea of internationalism in psychology.

The history of the international psychological congresses has recently been reported by Langfeld,² whose modesty forbade

him to mention the immense personal contribution that he himself has made to international understanding among psychologists. In the latter part of the nineteenth century there were few who claimed the title of "psychologist." There were physicists, like Fechner, and economists, like John Stuart Mill, and medical men, like Charcot, whose interests included psychology; but there was no science, no profession, and certainly no organization that could be called psychological. It was not until 1889 that "psychologists" assembled for the first time, in Paris under the presidency of Alfred Binet, to share their discoveries and their plans. Most of these "psychologists" were officially identified with philosophy, with medicine, or with one of the traditional sciences, but they had a common field of interest. Since then there have been periodic international meetings of psychologists. World War I dissolved the international fraternity, but communications were re-established at Oxford in 1923. World War II produced another split, but in Edinburgh in 1948 and in Stockholm in 1951 it was demonstrated anew that science knows no national boundaries. The Montreal Congress was held during the period of the "cold war," but the warm reception accorded our Russian colleagues, and the generous contribution that they themselves made, is ample evidence that communication across the Iron Curtain is not impossible.

The International Union of Scientific Psychology was officially created in 1951. Its stated purpose is to develop "studies and scientific researches in psychology, whether biological or social, normal or abnormal, pure or applied." The membership of the Union now includes twenty-one different national organizations, and the number will increase during the next few years. The task of the Union is difficult, but challenging. Fifty years ago, when psychology was still essentially European, the barriers of language and nationality were real, but far from insurmountable. Most psychologists knew several languages, and travel distances did not prohibit frequent meetings. Psychology was still an international science. During the past few decades, however, and particularly since World War II, the situation has changed.

There is probably less international communication today than at any peice time period in the history of our science

The two world wars are, of course, partially to blame; but only partially. The real reason is the mushroom growth of psychology in the United States. There are today more psychologists in the United States than in all the other countries of the world put together. Most of these read no language other than English with ease, and even if they do have some linguistic competence, they are flooded by so many English language publications that they have little time for books and articles in other languages. As a result American psychology has become sadly parochial. Psychologists of other countries are familiar with the work being done in America, but few American psychologists are aware of what is being thought and written in the rest of the world. One of the great challenges to the International Union is, consequently, not merely to bring psychologists of different nations together, but specifically to break down the parochialism of American psychology. The best weapon the Union now possesses is the international congress.

The Montreal Congress was the first to be held under the auspices of the International Union, and the first in twenty five years to be held on the North American continent. The United States should have been host, but its immigration laws threatened difficulties. As it happened however, the Congress did not suffer for Montreal proved to be an ideal location and Canadian hospitality lived up to its best traditions. Disappointment at the small attendance from the United States was offset by the feeling of intimacy that developed and by the general atmosphere of relaxation that was maintained.

One of the distinctive features of the Fourteenth Congress was its deliberate attempt to develop a planned program, designed to present not a haphazard array of volunteered papers but carefully prepared symposia on some of the live issues in contemporary scientific psychology. For more than a year a small committee had worked on the plan. Its first task was to decide after much deliberation and consultation, which of the many problems

areas deserved most to be represented at an international congress. Its second task was to persuade an outstanding representative of each area to act as organizer of a session; and this was not always easy. The final and most difficult task was the selection of the most appropriate participants. These had to be distinguished leaders of their fields, but they had to be distributed geographically; subsidies had to be found for those from overseas; drafts of papers had to be circulated in advance; volunteered papers on topics outside the compass of the plan had to be politely rejected. And there were endless practical problems of translation, of scheduling, and so forth, that threatened to reduce the committee to a state of neurosis. It was a confusing and, at times, frustrating assignment; but the results seem to have justified the effort. The Congress demonstrated that such a plan can be made to work; and many have suggested that it might well set a pattern for the future.

It was clear in Montreal that barriers to communication were being successfully broken down. Even more impressive, however, was the high level on which ideas were being exchanged. In session after session it was evident that problems and points of view were actually being clarified. G. W. Allport, in his Overview, has indicated that there are real differences between the British-American and the Continental European approaches to the theory of personality. These differences appeared clearly in the papers and in the discussions. The differences were not resolved, and the debate, both inside and outside the formal sessions, became fairly warm at times. What is important is that the debate generated not merely mutual respect, but also a realization that both approaches are necessary to a complete theory of the individual. This achievement was equally striking in other fields: for instance, in the discussions of instinct, of perceptual theory, and of conditioning, in each of which different national groups have been going their several ways. It is difficult to believe that psychological research in each of these countries will not be enriched as a result of these discussions.

One welcomes the prospect of increasing international com-

munication in psychology, facilitated by the international congresses, by volumes such as this, by a more systematic interchange of publications, by cooperative international research, and by other means developed by the International Union. Montreal represented a notable step in this direction. One noted with regret, however, that the sessions were dominated by psychologists from North America and the countries of Western Europe. The important contribution of the Russian delegation has been mentioned, and there were scattered but significant contributions from Japan, India, the Near East, South Africa, Latin America, Australia, and New Zealand; but none of these were quantitatively in proportion to the importance of the cultures they represent. If psychology is to be truly a science of man it must break down the parochialism not only of the North American but also of the whole Western European tradition.

The values in internationalism are obvious; but there are dangers. Internationalism involves the attempt to understand one another's assumptions, to share facts and techniques, to identify common problems and goals. This is good. But one shudders at the thought that from all this mutual sharing there should emerge a pallid eclecticism; and one shudders still more at the thought that through the sheer power of numbers one national tradition should establish its hegemony in psychological science. Psychology is still too young to be eclectic; and psychologists, of all people, should know that a mere majority vote cannot establish a fact or determine the rightness of a theory. Where men, even in small numbers, are thinking about man there will emerge ideas that are worthy of consideration. One's hope is that for many years to come psychologists of different cultures will regard each other's approaches not as mutually antithetical but merely as different, not necessarily to be conquered or reconciled but to be understood.

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